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RESTRICTIVE RAILWAY
LEGISLATION



RESTRICTIVE RAILWAY LEGISLATION

BY

HENRY S. HAINES

MEMBER AMERICAN SOCIETY OF CIVIL ENGINEERS; MEMBER AMERICAN
SOCIETY OF MECHANICAL ENGINEERS
FORMERLY VICE-PRESIDENT AND GENERAL MANAGER "PLANT SYSTEM" OF
RAILROAD AND STEAMSHIP LINES, ALSO COMMISSIONER SOUTHERN
STATES FREIGHT ASSOCIATION; EX-PRESIDENT AMERICAN
RAILWAY ASSOCIATION; AUTHOR OF "AMERICAN
RAILWAY MANAGEMENT"



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To

MELVILLE MADISON BIGELOW, PH.D., LL.D.

DEAN OF THE
BOSTON UNIVERSITY SCHOOL OF LAW

This Work is Inscribed

WITH THE ESTEEM OF THE AUTHOR

PREFACE

THIS work contains the substance of a course of twelve lectures delivered in April and May, 1905, at the Boston University School of Law, the purpose being to present the manner in which legislation and judicial decisions have affected the operations of railway corporations in their relations to the public.

References to publications on these subjects have been principally to the following: "Railroad Origin and Problems," Charles Francis Adams, Jr., 1878; "Railroad Transportation," President A. T. Hadley, 1885; "American Railway Transportation," Professor E. R. Johnson, 1903; "Railway Legislation in the United States," Professor B. H. Meyer, 1903; "Legal Nature of Corporations," Professor E. Freund, 1897; "Congressional Land Grants," Professor J. B. Sanborn, 1899; "Great American Canals," Archer Butler Hulbert, 1904; and the Reports of the United States Industrial Commission and of the Interstate Commerce Commission.

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RESTRICTIVE RAILWAY LEGISLATION

CHAPTER I

INTRODUCTION

THE prevailing idea in this work, that which will give it continuity, is the gradual development of restrictive legislation in the relations of the State to the railroad system of this country, from its beginnings to its present network of over two hundred thousand miles,—a mileage nearly equal to that in the rest of the world.

I shall introduce my subject by a reference to those beginnings. In doing so, I must go back to the career of the father of our country, who, first in peace as in war, was also first to perceive the value of artificial high-ways in maintaining communication between the Atlantic States and the Northwestern Territory. It had been impressed on his mind when, in his youth, he had guided the remnant of Braddock's command back from Fort Duquesne to the seaboard. He kept it in view during the Revolutionary War, and, with the advent of peace, he took steps to put his ideas into effect. He was the prime mover in the organization of the Potomac Company, for the purpose of improving the

navigation of the upper Potomac River and of connecting that river by a wagon road with the navigable waters of the Ohio.

He committed his views on this subject to paper in a document which is a model of its kind. In that document he refers to the part which the navigation of the Great Lakes was inevitably to play in the extension of civilization westward. He recognized Detroit as the point at which the traffic of these lakes would converge and minutely compared the rival routes thence to the seaboard at Alexandria, Va., Philadelphia, and New York. He referred particularly to the advantages which the route to New York possessed in avoiding the Allegheny Mountains. In fact, he had made a personal examination of the Mohawk valley while in command of the Continental army in New York. In this paper he not only outlines the essential features of these several routes, but even glances at the possibility of an artificial waterway to connect upper Lake Huron with the Ottawa River and Montreal, an enterprise only now taking actual form. If anything could increase our admiration for the genius of Washington, it is his comprehensive treatment of this fundamental problem in the development of the transcontinental highways of the United States.

When Washington was elected President of the United States, the prosecution of work by the Potomac Company languished for lack of capital. In the meantime,

an enterprise of far greater promise had been undertaken in the construction of the Erie Canal, which was commenced in 1817, and in 1825 the Great Lakes were connected with the Hudson River by an artificial waterway. The completion of this work constituted a new era in the development of internal communication in this country. The facilities which it afforded New York for reaching the vast territory tributary to the Great Lakes laid the foundation for the subsequent pre-eminence of that city and aroused a spirit of emulation among the merchants of Philadelphia and Baltimore, who had hitherto enjoyed a virtual monopoly of the trade of the region between the Ohio River and the Lakes. Even Boston had a project for a canal to connect with the Erie Canal, including a tunnel under the Berkshire Hills.

The project of the Potomac Company led to the formation of the Chesapeake and Ohio Canal Company in 1827, with a capital of \$6,000,000, but after a careful survey it was estimated that the work would cost \$20,000,000, and the canal was never built beyond Cumberland, Md. The resuscitation of this canal project aroused the people of Philadelphia to action, and in 1826 the State of Pennsylvania began the work of connecting Philadelphia and Pittsburg, four hundred miles apart, by a combined system of horse railroads and canals, which surmounted the Alleghenies by a succession of inclined-plane railways operated by stationary

engines. This great enterprise was prosecuted with economy and vigor, and in 1834 the Atlantic seaboard was connected with the Ohio River by this successful transportation route.

The city of Baltimore, which had previously possessed the best facilities for communication with the West, found its position threatened by the Pennsylvania improvements on one side and by the Chesapeake and Ohio Canal on the other. In 1827 its merchants, in self-defence, projected an enterprise which for boldness of conception was without parallel elsewhere. This was nothing less than the construction of a continuous railroad from Baltimore to the Ohio River, at a time when there was not a railroad in operation in the United States except a quarry road, three miles long, at Quincy, Mass., and a gravity coal road nine miles in length, in Pennsylvania, both worked by horses and by stationary engines. At that date locomotives were still in an experimental stage in England, and the Liverpool and Manchester Railway was not opened until three years afterward.

The possibilities of locomotive traction by this time had made such an impression upon the leading minds of the country that canal projects were thrown aside, and attention was very generally diverted to railroad enterprises. By January 1, 1835, there were 948 miles of railroad in operation and 877 miles in progress. Notwithstanding the commercial crisis of 1837, by

1840 there was a railroad in operation in every State on the Atlantic seaboard, also in Ohio, Michigan, Illinois, Kentucky, Alabama, and Louisiana. Boston then became a railroad hub with lines radiating to Lowell, Worcester, and Providence; and the first important through route for passengers was by rail to Providence and thence by steamer to New York, taking from 2.00 A.M. to 6.00 P.M. for the journey. The Boston and Worcester Railroad was but the first link in a line to the Great West; and when the Western Railroad was opened to Albany, in 1841, it was the first road in this country to develop a through freight traffic, which was in connection with the Erie Canal and with the all-rail line from Albany to Buffalo. Before the city of New York had an all-rail connection with the Great Lakes, Boston capital had been instrumental in the construction of the Michigan Central Railroad from Detroit to Chicago.

Nor were the efforts to join hands with the Far West confined to the cities on the North Atlantic seaboard. In 1828 a road was chartered from Charleston, S. C., to Augusta, Ga., projected as the first link in a chain of roads to the Mississippi River at Memphis, a programme which was only completed immediately before the Civil War. But the road from Charleston to Augusta, 135 miles, when completed in 1833, was the longest railroad in the world. The Baltimore and Ohio Railroad and the Pennsylvania Railroad reached the

Ohio River almost simultaneously, in 1853 and 1854. New York had an all-rail line to Chicago and to the Mississippi River about the same time.

The construction of the trunk-line communications to the West by rail was incited by the success of the Erie Canal, an epoch which may be identified with the beginning of the development of the marvellous prosperity of this country. Everywhere the railroad was looked upon as the one thing needful to build up interior towns and to make the wilderness populous. In this time of hopefulness every one was not only willing, but eager, to lend a helping hand to a railroad project. Whatever was asked for was granted, with a liberality that was much regretted in later days.

The gold of California gave renewed impetus to railroad projects until the commercial crisis of 1857 and the Civil War put a damper on them. With the return of peace there was a marked revival. The transcontinental route over the Union Pacific and the Central Pacific roads was opened in 1869, and construction then became most active in the Northwestern States. A similar revival followed the crisis of 1873. By 1880 the principal field of activity was in the Southwestern and Rocky Mountain regions, and in ten years, to 1890, the railroad mileage of the country had increased from 93,000 to 166,000 miles. In the next decade the mileage increased but 28,000 miles. This falling off in construction was due to the fact that the longer lines required

for the wants of the undeveloped territory had been in great measure completed, and it is not likely that in any future decade there will be 73,000 miles of main line constructed, as there was from 1880 to 1890.

I call attention to the fact that the Liverpool and Manchester Railway was not completed until 1830, in order to emphasize the proposition that the railroad system of this country was developed contemporaneously with that of Great Britain and independently of it. Indeed, by 1855 the railroad mileage of the United States was about equal to that of all Europe. The different conditions under which the two systems have been developed are also to be taken into account in comparing the attempts at restrictive legislation in this country and in Europe. In European countries the proposition was to provide better facilities for a large traffic for short distances between long-established trade centres. In this country the purpose has been to create a civilization in the trackless wilderness, and it is not surprising that the instrumentality which was efficient in bringing this about should have been eagerly welcomed, and that the terms on which it was offered should not have been closely questioned.

The thing to do was to get a railroad, and railroad projects multiplied indefinitely. At first they were short lines serving the local requirements of isolated communities. The contrast was so great in the facilities afforded them in comparison with the common carrier

on the highway that the people thought only of the benefits which the railroad conferred. But as roads from rival commercial centres reached the same rural region, as a city that had long enjoyed a monopoly of trade in a certain territory found its business divided with a competitor, its merchants looked to their own railroad for protection against the newcomers. The railroad management sympathized with this feeling and, disregarding prudent business principles, entered upon a reckless career of competition. It was, in fact, a trade war, in which the tide of battle tended first one way and then the other, with the alternate reduction of rates which were suddenly restored by truces of short duration.

As these frequent and severe fluctuations in rates disturbed the ordinary course of commerce, resort was had to secret rebates to the principal merchants, which left the small dealers helpless. The merchants in the towns intermediate between the competing points saw their own business drawn away from them, and the effects of unregulated competition were at length made manifest in the bankruptcy of one or more of the competing railroad companies.

Then came a period of receiverships, a wonderful judge-made device for prolonging the agony, for the receiver was immune against judgment creditors. In fact, the receivership developed a new basis of credit upon the estate of the bankrupt corporation, and the

managers of the competing lines which had so far remained solvent found themselves confronted by a new foe, stripped of all encumbrances and backed by the power of the court.

Each section of the country, as it filled up with competing roads, went through this experience. As the bankrupt corporations were sold under foreclosure, they were generally reorganized in the interest of the bondholders and reëntered the field of reckless competition. In time the managers of the stronger corporations, made wiser by suffering, began to devise means for minimizing competition by agreements among themselves, to which their customers were not a party. As competition diminished, the public dissatisfaction increased. The commercial centres that had profited most by the competition were the most influential in politics and made the loudest complaints, egged on by merchants who had been made rich by secret rebates. It was not a case for the courts, but for the legislatures; not for the lawyer, but for the politician, and, when the conditions favored him, he made the best use of his opportunities.

This was especially the case in the Western and Southern States, which had rendered liberal aid to railroad construction and now found themselves liable for interest in default on bonds that they had guaranteed for the defunct corporations. In the political excitement that ensued all question of justice was lost sight

of, but after fruitless efforts to evade the consequences of its own acts, the State was usually compelled to make settlement with the bondholders as best it could. In some instances, the State took possession of the road; and we then saw State management by political favorites, in which the attempts to maintain competition with due regard to law and yet to keep in favor with conflicting interests brought about some embarrassing situations.

But in time the experience of able financiers was brought to bear upon the railroad situation, resulting in the consolidation of intermediate links into long lines occupying the principal thoroughfares and controlling their own feeders; so that each of these systems covered a considerable territory in which it was without a rival. The first assault of the politicians on this order of things was directed at the consequent stifling of competition. Their initial experiments at prevention by legislation having proved ineffectual, they next created State railroad commissions with powers of mixed characteristics, executive, legislative, and judicial, avowedly for the purpose of fighting the corporations. The railroad managers accepted the challenge and carried the contest into the State courts, only to encounter defeat.

The more powerful corporations carried their cases into the federal courts on constitutional points. There the contest was long maintained, until they were worsted

in the tribunals of final appeal and had to make terms with the State commissions. This still left the more valuable interstate business under their own control, and they trafficked and fought with each other over it in the same old way, disregarding the interests of the unrepresented third party, the public, until the matter got into Congress and the Interstate Commerce Commission was organized. The corporations engaged in interstate traffic immediately opened up a campaign against the interference of the Commission, which has been carried into the Supreme Court with indecisive results — and the war is still on.

In discussing the relations of the railroads and the State, the issues are frequently referred to as problems. For many years, both in courts and legislatures, the solution of these problems has been sought in the analogy of railways to highways. It was not generally recognized that a railway is not a public highway, that it is not solely an improved line of communication, but a more efficient and more highly organized method of transportation which has supplanted both the public highway and the common carrier on that highway. Mr. Charles Francis Adams, Jr., has well said that this is the fundamental proposition on which must be based any successful effort to reconcile the relations of the State with the railroad system of this country, in its successive stages of promotion, construction, operation, competition, combination, and consolidation.

The development of this system has been so rapid, it has attained such an expansion, and has assumed such unexpected aspects, that no plan for the adjustment of its relations with the State, however well conceived, can be looked upon as anything more than an expedient for providing for a transitory condition of affairs. Not until the course of development itself shall have slackened and the ultimate goal shall be more nearly in view, not until then can any measure of an approximately permanent nature be devised for the satisfactory adjustment of these relations, for a solution of the problems that have successively presented themselves during the course of evolution of our national railroad system.

In this phase of the development of the railroad problem we are still involved, and up to this point I propose to follow the restrictive action of the State as applied to the successive conditions of that problem. I am but too well aware that this has already been done by Mr. Charles Francis Adams, Jr., and by President Hadley, far more skilfully than I can hope to do it, and the only field that they have left for newcomers like myself is to take up their line of thought at the periods at which they have respectively left it, that is, by Mr. Adams in 1878 and by President Hadley in 1885.

Just here I may say that the several so-called railroad problems are reducible to one basic problem, viz. the efficient regulation of the management and operation

of the national railroad system in matters affecting the public welfare. To discuss this problem in an orderly way, I shall undertake to trace the successive steps in the organization and operation of the railroads of this country and to connect them with the correlative development of State interference through legislation and in the courts.

CHAPTER II

RAILROAD CORPORATIONS

THE relations of the State to a corporation begin with the act of its creation, with the charter to which it owes its existence. Originally this was a grant of special privileges or franchises. It was a gift from the king himself as a mark of favor. Two hundred and fifty years ago Hobbes said in the "Leviathan" that charters were not laws, but exemptions from the law, which is a pretty good definition of a franchise.

The features that distinguish railway charters from those granted to trading companies are principally the power to collect tolls and to exercise the right of eminent domain, and on the derivation of these franchises has been primarily based the assumption that a railway corporation is essentially of a quasi-public character. The exercise of the right of eminent domain has impressed itself upon popular opinion as a notable mark of sovereignty, and, consequently, careful limitations of its use have been continuously embodied in special charters and in general railroad laws.

From the most ancient times the collection of tolls was a compensation for guarding the highway. It was

a valuable source of revenue to the feudal lords of the Middle Ages that, with their overthrow, passed to the king, and by him was bestowed upon his favorites. Later, it became a franchise of turnpike and canal companies. The first railways were merely tramways over which coal was transported from the collieries in the wagons and with the horses of the mine-owners, so that the charge for the use of the track was purely a toll. When locomotives replaced horses it was supposed that the traffic would continue to be conducted in wagons belonging to distinct common carriers.

Though this proved impracticable, the prevailing views as to the nature of tolls led to provisions in the earlier English railway charters for their regulation that included maximum tariffs for all sorts of commodities, divided into charges for use of track, for use of wagons, for use of motive power; as well as for all combined. Occasionally these tariffs were carried to ludicrous extremes. One charter included a tariff of 381 items, in which the charge per mile for the carriage of a horse, mule, or ass was differentiated from that of a calf, pig, or other small animal. Legislation of this character was only prevented from becoming a serious hindrance to commerce because it was found inapplicable to the exigencies of railway traffic.

Up to the year 1845 the restrictive legislation as to charters was directed mainly to matters of location and construction, in which the Englishman's sensitiveness



to any invasion of his privacy, the high valuation of real estate, and the prejudice against highway crossings led to a jealous limitation as to the power of condemnation of private property and of freedom in the choice of routes. Competition as between rival projectors was limited only by the expense of their own contests in the endeavor to defeat each other's schemes before Parliamentary committees.

The English railway charters begin with a declaratory preamble in which are set forth the public benefits that are to accrue from the construction of a railway on the route as described, and upon this declaration the claims for specific franchises are grounded, as being in furtherance of a work of public utility. Great stress is laid upon the character of this declaration, and upon the preamble much of the contention was centred in the hearings in committee. This was the case with the charter of the Liverpool and Manchester Railway Company, which was strenuously opposed by two rival canal companies, then paying 100 per cent per annum. It is said that these proceedings, though ineffective, cost \$350,000 to the railway company. The great expense attendant on getting charters through Parliament added materially to the capital accounts of the railway corporations. From 1872 to 1882 the expenditures in promoting railway bills before Parliament amounted to \$19,000,000 and the aggregate expenditure to that time was estimated at over \$80,000,000. These hear-

ings, though protracted and expensive, afforded opportunities for the free discussion of matters involving the private and public interests that the projects under consideration might affect, and brought out ideas as to the efficient regulation of railways, which anticipated many of the conclusions that were subsequently drawn from bitter experience. No attempt was made to pass a general railway law. From 1844 to 1847, 637 special charters were granted; 11 of them were for rival projects occupying the same valley. Private capital was so freely subscribed that there was no disposition to lobby schemes for subsidies through Parliament, except as to some projects in Ireland, where the peculiar conditions made government assistance desirable.

The panic of 1847, brought on by excessive speculation in railway shares, materially changed the aspect of affairs. Many corporations were forced into liquidation, and the opportunities for merging them into larger undertakings were freely utilized, so that public opinion became aroused at the consequent cessation of competition. "Joint-purse arrangements," or the pooling of earnings, was legalized, and the links in the through lines out of London were only permitted to amalgamate on condition that "running rights" into the metropolis were secured to competing corporations in the outlying territory. But neither of these measures served to deter the absorption of those corporations by the trunk lines. Special commissions considered the

subject, but it proved as impracticable to restrict amalgamation as it had seemed inadvisable to prohibit it, and, after 1854, the tendency of British railway legislation was toward the regulation of rates.

The successful accomplishment of transportation by railways in England attracted attention on the Continent, where it was first undertaken in Belgium. The continental governments, from the very first consideration of the subject, treated it differently from the way in which it had been managed in Great Britain. In England the railway system had been a development of colliery tramways applied to turnpike and canal traffic, without anticipation of the revolution that was to follow in transportation methods nor of the effect upon commerce. When the subject was taken up on the Continent, the possibilities of railway transportation were more fully recognized, not only commercially, but politically as well.

The continental governments, therefore, determined at the outset to keep the control of railway development in their own hands. They could the more easily do this, as the ordinary attitude of their people toward novel projects was to await government action. This was peculiarly the case as to highways, for, from the days of the Roman Empire, the highways had been an imperial care as a military measure, both as to their construction and maintenance. This disposition of the matter had become traditional, and when canals were

projected as improved means of commercial communication, they also were begun and continued as government undertakings.

Therefore, when railways were first projected in Belgium, there was no thought of them as strictly private enterprises, and this continued to be the case in all of the smaller European States. But in the larger States the projects as planned called for greater expenditures than it seemed prudent for their governments to assume; so that the realization of these schemes was left largely to capitalists, to whom the franchises were granted under the name of concessions. With the experience in England to guide them, the continental governments proceeded more systematically in granting these concessions, in prescribing the routes and other conditions of location and construction, and also as to traffic regulations and profits. Where the government did not condemn private property directly, the company enjoying the concession acted as its agent or tenant in doing so rather than as a principal. The general features of the concessions, though following the charter of the Liverpool and Manchester Railway Company as a model, partake so largely of the characteristic interference of the government in details that they have exercised no influence over the development of railroad legislation in this country, and have but little value in such a connection except as to the provisions for insuring compliance with the conditions on which a con-

cession is granted and as to the government regulation of rates.

Perhaps the earliest charter for a scheme of internal improvement in this country was that granted by Virginia, in 1784, to General Washington's company for improving the navigation of the Potomac River. The successor to the Potomac Company, the Chesapeake and Ohio Canal Company, undertook a project for internal improvement of an interstate character under a Virginia charter of 1824, which was assented to by Maryland and by Congress in 1825. This assent of Congress was the earliest federal franchise relating to interstate commerce. The earliest charter for a railroad corporation seems to have been that of the Mohawk Valley Railroad Company, in 1825, but the earliest one for an interstate railroad was obtained by the Baltimore and Ohio Railroad Company from Maryland and Virginia, in 1827 and 1828. The first charter granted by Massachusetts was that of the Boston and Lowell Railroad Company, in 1829.

These charters followed, in the main, the precedents established by that of the Liverpool and Manchester Railway Company as to form and as to provisions concerning the exercise of the power of condemnation, etc.; but as the advantages of the new method of transportation began to be foreshadowed, the desire for their enjoyment and for the encouragement of railroad construction outran the thought of legislative restriction.

The virtues of the preamble were found irksome, and it soon was dropped as an essential feature of railroad charters.

The charter granted by Maryland, in 1827, to the Baltimore and Ohio Railroad Company contained twenty-three sections. The first twelve were taken up with provisions as to subscriptions, elections of officers, annual meetings, etc. A certain number of shares were reserved for subscription by the State and by the city of Baltimore. Authority was given to acquire, sell, and lease property for the purposes set forth in the charter, and no further, also the right of perpetual succession and of exercising all the powers lawfully exercised by other corporate bodies. The only restriction is that the by-laws shall not be contrary to the laws nor to the provisions of the charter. The thirteenth section gives authority to increase the capital stock indefinitely and to pledge the company's property for loans without limit. The first reference to the route of the road is in the fourteenth section, which defines it as "from the city of Baltimore to some suitable point on the Ohio River" to be determined by the board of directors. The board was further empowered to make "lateral roads in any direction whatsoever" in connection with the said railroad. The fifteenth and seventeenth sections provide at great length for the exercise of the power of condemnation. The sixteenth provides that in crossing highways the railroad shall be so constructed as not to

impede passage along the highway. The eighteenth provides maximum charges for tolls and for transportation separately; also that no other person or company shall "travel upon or use any of the roads of said company" or "transport persons, merchandise, produce or property of any description whatsoever, along said roads" without permission of the company; also that the shares of capital stock "shall be deemed and considered personal estate, and shall be exempt from the imposition of any tax or burthen by the States assenting to this law." Section 19 permits the board to declare such dividends from net profits as it may deem proper. Section 20 provides a penalty for injuring the company's property by forfeit of \$500 for every such offence, recoverable by action for debt, and the guilty person shall be subject to indictment, and upon conviction to fine and imprisonment. Section 21 provides that as soon as the company is organized it shall have all the powers granted by the act and be subject to its regulations as to all its property in the State. Section 22 provides that the road shall be commenced within two years and be completed within the State within ten years after its commencement, or the charter will be forfeited. Section 23 reserves the privilege for citizens of Maryland or for any company incorporated under its authority to connect with this road and branches, "provided that in forming such connection no injury shall be done to the works of the company."

I have been thus particular in reciting the provisions of this charter, as it was the first important one granted in this country. Virtually the only restriction upon the power of the board of directors in the construction and operation of the road was the establishment of maximum charges, which proved to be not at all applicable to railroad traffic. The possible construction of a parallel road was not thought of and therefore not prohibited.

The provisions of this charter were assented to by the other States through which the road was to be constructed, and it served, in a general way, as a model for charters subsequently granted in adjacent States. Those granted by Massachusetts are drawn more closely in accordance with the English prototype and were followed in charters granted by the other New England States.

The early charters were liberal as to privileges. The spirit in which they were granted is illustrated by a toast offered at the opening ceremonies of the Boston and Worcester Railroad by an ex-governor of the State: "Railroads — We are willing to be rode hard by such monopolies." The restrictive provisions in these charters were those which had been common to all joint-stock companies. There was, however, a disposition to exceptional restriction in the refusal to grant to the Boston and Lowell Railroad Company an exclusive franchise in perpetuity between its termini. A common restriction was to require the completion of a road, or

of a specified portion of it, within a limited period, under penalty of forfeiture of the charter. The only abuse of power that was anticipated was that the profits would be too high; but provisions to prevent this were easily rendered nugatory. There was no thought of restricting the amount of capital stock to any estimated cost of construction of the line described or permitted to be built under the charter, nor of a definite assurance that any payment would be made on the stock subscribed for, beyond a small instalment at the time of subscription. Even this provision was often omitted. The voting power was sometimes proportionately diminished with the increased holdings of individual stockholders, but generally it was a vote for each share.

As railroad construction extended westward, the indifference to restrictive legislation increased with the greater necessity for such means of communication, the sparseness of population, and the proportionately greater area of unimproved lands. In many States, the railroad charters seem to have been drawn without reference to previous experience in older communities, and even without an effort to make their provisions uniform in the same State under similar conditions.

Here and there are to be found sporadic instances of restrictions, either borrowed or original, that indicate the influence of some individual idiosyncrasy upon the action of the legislature. These relate mainly to rates of transportation and occasionally to a reservation of

a discretionary power of prospective purchase by the State, borrowed from earlier Massachusetts charters; or to a limitation of the life of the charter. Exemptions from taxation were the rule, and the first important reaction against unlimited grants to railroad corporations accompanied the increased value of railroad property thus exempted. Some of the early projectors of railroads in the Southern and Western States availed themselves of valuable banking franchises in connection with the charters that they obtained; but this privilege was opposed by the numerous private banking houses and was expressly prohibited in subsequent charters. A provision to insure the commencement of the work and the completion of the line within certain limits of time was ordinarily included. Many charters required that an annual report should be made to the stockholders in a more or less specific form, and occasionally a report was to be made to the legislature. Protection was frequently assured against the construction of a parallel line within a certain period or distance. The route was rarely described with any greater accuracy than as between certain cities, or even from a certain city to some eligible point on a certain river or lake or in a certain township.

The earlier railroad corporations relied mainly upon local subscriptions for the prosecution of their enterprises, which were intended only to serve local purposes. But as these local roads became connected, they were

utilized for traffic beyond their immediate territory. At one time there were eleven distinct corporations between Albany and Buffalo. The traffic between those cities, and especially after the opening of the road from Albany to Boston, became of far greater magnitude than any business local to either of the intermediate roads. They were now links in a chain of interstate communication, but links so disjointed as to create much friction among themselves as well as with the shippers engaged in interstate commerce. Where such conditions existed they could only be removed by consolidation. This required a further exercise of the sovereign power, which, however, was invoked for the public benefit as well as in the interest of the shareholders in the corporations thus merged in one, and should therefore be distinguished from the subsequent mergers intended for the suppression of competition. Advantage was taken of these opportunities to insert restrictive clauses in the acts permitting consolidation, as in limiting the local fare on the New York Central Railroad to two cents per mile. This consolidation took place in 1853, and in 1858 the Hudson River Railroad Company and the Harlem Railroad Company were included. In this instance there was a novel feature in the merging of parallel and competing lines under a single corporation. The process of consolidation was extended to branch lines, feeders, and subordinate lines of greater importance, until now there are consolidated systems

of 5000 to 10,000 miles. Yet another privilege granted to railroad corporations was the power to invest in auxiliary undertakings, as in river and marine navigation, in banking, hotel keeping, etc.; and still further, to lease or operate other railroads and even to hold stock in other railroad corporations, by which an absolute control was exerted over their policy, through owning perhaps but a bare majority, and sometimes less than a majority, of their shares.

By 1870 the most of the beneficent features of railroad charters had been fully developed, including State aid by stock subscriptions, bond guarantees, and land grants. In the reaction that followed upon the era of failures through fraudulent or reckless management, and the subsequent reorganization and consolidation of bankrupt roads, the period of restrictive legislation was ushered in by a violent agitation against the corporations which had become possessed of roads sold under foreclosure of defaulted mortgages on which the States had been indorsers.

The first idea was to prevent the cessation of competition by hindering the consolidation of parallel or competing lines; and when the courts turned down legislation of that character as being unconstitutional, popular sentiment in some States brought about conventions to so amend their constitutions as to obviate, in granting new charters, the objections that the courts had raised. Offending railroad companies could not get

their charters amended in the slightest details unless they would consent to resign their immunity from such interference and accept the restrictions imposed by the amended constitutions.

In the period of extensive construction, the legislative sessions became so encumbered with bills for railroad charters and amendments that resort was had to a speedy way of disposing of them. To save time and trouble in drawing up new charters, and probably to evade litigation as to the legislative intention, reference was made by name only to some previous charter, and a grant was made of all the rights and privileges therein contained, without further description, somewhat after the fashion of "the most-favored nation" clauses in commercial treaties. This pointed the way to the enactment of general laws with reference to the exercise of the power of expropriation and to grants of right of way through the public domain, with a growing tendency to introduce other restrictions. Sometimes the railroad legislation of this character was included in general incorporation laws, but more frequently the provisions specially applicable to railroads were treated separately and included sections of previous statutes which had already regulated certain matters connected with railroads. The first approximately complete legislation as to corporations in general was the law passed in New York, in 1850, in which railroad corporations were included, and after which

have been patterned general railroad laws in most of the other States. The Massachusetts law of 1855 is more comprehensive and, in many respects, a better model. Even during the Civil War, in 1863, a provision had been somewhat surreptitiously introduced into the codified laws of Georgia, reserving to the State the right to withdraw the franchises contained in private charters unless such a right was expressly negated in the charter; but sweeping provisions of this character are seldom utilized except under conditions of political agitation. In the Georgia constitution of 1877 the introduction of this principle into the laws by the codifiers was expressly ratified and strengthened by prohibiting irrevocable grants of special privileges or immunities or the passage of special laws in any case for which provision had been made by an existing general law.

Notwithstanding the existence of general laws intended to restrict the granting of special charters, and in some cases expressly prohibiting such grants, special charters continued to be passed, even where they were forbidden by the constitution. Three days after the passage of the general railroad law in Kansas, in 1857, a special charter was granted without reference to the existence of this act. In the construction and operation of one great transcontinental line, a special charter was utilized that had been granted twenty-five years previously for an insignificant local road, though every State

through which the great system was built had, at the time of its construction, laws or constitutional provisions prohibiting grants of special charters.

In a few of the States and Territories of the Far West, general railroad laws were enacted before any special charter had been granted, but even in those States the transcontinental roads are operated under special charters granted in other States and recognized through comity. This extension of the privileges of a charter granted in one State for the construction of a road in that State to the construction and operation of the extension of the same line through other States has led to the concentration of the management of such a line at some point far away from the direct control of the State governments, as the management of the New York Central allied lines in New York City and of the Pennsylvania system in Philadelphia. A more remarkable instance is the control of the combined lines of the Central Pacific and the Southern Pacific railways by a Kentucky corporation.

The concession of powers of this magnitude to foreign corporations has not been altogether the result of indifference by those who should have stood forth as champions of the sovereignty of their respective States. It has been due, in a great measure, to the overshadowing importance of interstate commerce, which does not brook the limitations imposed by political frontiers any more than those created by natural obstacles.

The exigencies of interstate commerce have also influenced an enlargement of the field of comity to foreign corporations, as between the States of the Union, to limits far transcending those recognized between adjacent sovereignties in Europe, and this has induced enterprises engaging in interstate commerce to be chartered in those States which offer the most liberal conditions. Of course this comity conforms to the constitutional privileges of a citizen of the United States to trade in any one of them. Though foreign railroad corporations are not technically within the meaning of this provision, they have had the privilege specifically conferred by Congress under its power to regulate interstate commerce. The first direct recognition of railroad companies by Congress as federal agencies in the conduct of interstate traffic was a result of experience in the Civil War. In 1866 an act was passed which has been called "the charter of the American railway system." It authorized any railroad company in the United States, operating a road by steam, to transport passengers and freight from one State to another and to receive compensation therefor, also "to connect with roads of other States so as to form continuous lines for the transportation of the same to the place of destination." Subsequently, State corporations were specially authorized by act of Congress to extend their lines into the Territories.

The incorporation of a railroad company under a

general law is not altogether comparable to a special charter. It is not a legislative, but an administrative act, partaking more of the nature of a license than of a franchise. Compare the charter of the Baltimore and Ohio Railroad Company of 1827, already analyzed in this chapter, with the articles of incorporation, dated 1894, under which the Southern Railway Company operates many thousand miles of railroad, covering the whole region south of the Potomac and the Ohio rivers and east of the Mississippi. This company was organized under the general laws of Virginia, with special reference to an act previously passed enabling the purchasers at foreclosure sale of the Richmond and Danville Railroad Company to become a corporation. Four associates, named in the articles of incorporation, were empowered: first, to become a corporation under the name of the Southern Railway Company; second, to hold the property and to enjoy the franchises of the Richmond and Danville Railroad Company; third, fixing the amount of the capital stock and providing for its increase; fourth, power to issue bonds to a specified amount in addition to prior liens, with permission for a further increase; fifth, to use its stock and bonds in the purchase of other property; sixth, provision for holding the first meeting of the board of directors by naming its members — and that is all — except the signatures of the associates with a notarial acknowledgment and the filing of the docu-

ment with the Secretary of State. The simplicity of this plan of forming articles of association is commendable; yet if the general act under which they were formed were the only basis for the existence of the corporation, if that act were repealed, would not the corporation be stripped of every power which could not be exercised by its shareholders as natural persons?

As we follow the evolution of railroad corporations from the adaptation of turnpike and canal charters to the most recent laws of a general character, we are struck by the lack of systematic legislation. Throughout all the States of the Union, one legislature seems to have improved but little upon another, except to infuse into the language of the laws which they imitate an irrational spirit of opposition to monopoly, perhaps neutralized by adroit manipulation in the interest of the very power that it is sought to restrain.

For a long time there was a marked lack of administrative machinery for the enforcement of restrictions, even of a penal character. Legislators seem to have assumed that corporation officials would voluntarily fulfil their charter obligations without the supervision of any external agency. The establishment of State commissions has, however, provided such an agency, which has been generally utilized for this purpose. The mode of formation of a corporation under the general laws is, with a few exceptions, open to criticism as being without any official supervision on the part

of the State, other than a mere notarial act. Usually no farther official sanction is necessary to the subsequent organization of the corporation. The proceedings connected with this primary exercise of corporate powers are left entirely to the incorporators; so that by their sole act persons not even citizens of the State may take measures affecting important interests of the commonwealth, without its being known until those interests have been thereby injuriously affected. In Massachusetts there has been some efficient legislation to this end. Petition must be made to the commission, accompanied by a stock subscription of not less than \$10,000 per mile and by a proper map of the proposed route. Copies of this map are sent to the communities interested, in advance of the public hearing. A similar course is adopted in Maine. In several other States, maps are required to be filed with county officials in advance of construction, and in New York new projects must have the approval of the Railroad Commission.

The most recent constitutional enactments concerning railroad incorporation are contained in the constitution of Virginia, which went into effect in July, 1902, and, as embodying the latest practice, I will describe them somewhat in detail. Seven or more persons may form a railroad corporation for the purpose of purchasing, leasing, or building and operating a railroad, by signing articles of association in which are stated its name, principal termini, estimated length, name of each city

and county on the intended route, limit of duration of corporation (if desired), maximum and minimum capital stock, names of directors, not less than seven, for the first year, place of principal office, and any other provisions which they may introduce for the regulation of their corporate affairs, plan of financial organization, or for the government of stockholders or directors,—such provisions not to be contrary to this general law. The articles of association are then to be presented to the State Corporation Commission, which may issue or refuse the associates a charter. If the charter be granted, it is then to be recorded in the office of the Secretary of State. Foreign public service corporations already operating a line within the State may not acquire or use any additional public or municipal franchise without being incorporated under its laws.

The promoters of projected railroads have made their way to a successful launching of their enterprises by the insertion of a provision in their charters that they may proceed with the incorporation after a certain small proportion of the capital stock or a certain number of shares has been subscribed for; and they make this still easier by another provision that but a small percentage of the par value of these shares need be paid at the time of subscription. Such devices enable corporate enterprises to be entered upon with less capital than has been ostensibly provided and with much less than is necessary to carry the work to completion. The obvious conse-

quence of entering upon such an undertaking with insufficient capital is a resort to borrowing money at an early stage of construction; so that an inherent defect accompanies the progress of the work, which inevitably proves fatal to the original investors.

Nor are the stockholders themselves placed on an equality as to cash payments. The equivalent of cash is accepted from favored persons in the way of valuable considerations; real estate is accepted for stock subscriptions at excessive valuations; the services of promoters and attorneys have been paid for in stock; even the charter itself, a gratuity from the State, has been valued in stock for a large amount against cash paid in by unsuspecting subscribers. So far as this is done with industrial corporations, the frauds practised upon ignorant investors concern themselves alone; but when such schemes are connected with railroad companies, then the public interest is involved, for the traffic becomes permanently saddled with charges to pay dividends on stock that does not represent substantial value.

The evil effects of overcapitalization are now generally recognized in State legislation on railroads in various ways. The prevailing idea is to limit the ratio of bonds about equal to stock, which is the ratio existing in the total railroad capitalization of the country. This does not prevent both being increased *pari passu*. In Pennsylvania a definite limit has been fixed at \$300,000

per mile, equally divided between stock and bonds. This limit is virtually no restriction at all, as the average capitalization of our entire railroad system does not exceed \$64,000 per mile. In Massachusetts there can be no lawful increase of either stock or funded debt, unless approved by the State Commission after due hearing. Provisions of this character have been adopted in other States that have established railroad commissions. In many States the assent of the stockholders, frequently by a two-thirds vote, is required as authority for increased capitalization.

There is an increasing improvement in legislation relating to methods of keeping accounts and also as to publicity of proceedings affecting the rights of stockholders and the public. As a general proposition the public is not bound by the provisions of corporate by-laws; yet when the charter leaves important matters to be determined by them, a person dealing with such a corporation should be entitled to a knowledge of its by-laws sufficient for his protection. A railroad corporation, partaking as it does of the character of a public corporation, owes the public more information as to its affairs than an industrial or financial corporation does, and in publicity lies its best protection from injudicious and hostile legislation. It may also be noted that publicity in railroad matters does not invite the competition which may be stimulated by publicity of the affairs of an industrial corporation.

In the initial stages of a new factor in civilization, the terms before applied to similar processes gradually acquire a different signification under the novel conditions, and the development of such a factor should not be restricted by attempts to define those terms in legislation before they are clearly understood in their modified relations. But that initial stage has passed in railroad development. The new significance of such terms has been clarified by judicial investigations and decisions and it would be a great improvement in the preparation of general railroad laws if they contained such definitions of the important words used in them as would make the intention so clear that it would not be necessary to resort to litigation for an authoritative interpretation of them. This has been done to a certain extent in the Massachusetts law and in the Virginia constitution of 1902, but more thoroughly in the laws of Canada and of India.

In no State of the Union has there been a reconstruction of the general laws in accordance with an intelligent recognition of the stage of development that has been reached in the evolution of transportation by rail. It would seem that legislators cannot shake themselves free of the traditional analogy of a railroad to a turnpike. We must look for a real modern conception of this matter to the coming nation of the Orient; to the Japanese, who adapt rather than adopt the finest flower of our material civilization. In their general railroad

law they have divided a charter into three successive stages, preparatory, constructive, and operative. The projectors of a railroad scheme submit a proposition as to a route with a declaration of its advantages, upon which there is a public hearing, and if the proposition be approved, authority is given to make a survey and to present a definite map of location with estimates of cost. Notice is then given that the project is open to competition, and not until then can subscription lists be opened by the competitors. The franchise for construction is then issued to the highest bidder. When the road, or a section of it, is reported as finished, it is carefully inspected, including signalling apparatus and equipment, and the final charter for operation is issued. There is food for thought in this way of granting a charter.

Long experience in the practical working of railroad corporations has induced an opinion that the powers of a board of directors are not sufficiently limited, either in charters or in general laws, nor their responsibility sufficiently defined. As soon as the company has been organized by the incorporators and the board of directors elected, it takes possession of the assets and exercises the powers of the corporation. The board is perennially in power; the stockholders enjoy a brief period of authority for one day in the year. Even in their meeting the directors may sit as stockholders, generally with an assured control of the session

by proxy votes. For the stockholders with small holdings are scattered over the country; many of these holdings are the property of estates, of women, or of minors, and their proxies are on printed forms that are virtually general powers of attorney without limit as to time of expiration.

Under such conditions, the acts of the board are without efficient supervision, and if the precaution has been taken to have its minutes read and perfunctorily approved at the stockholders' meeting, its members are released from all further responsibility for their acts, so far as they are outside of the purview of a statute of frauds. The board itself is frequently controlled by an executive committee in daily session; so that the monthly meetings of the board become almost as perfunctory as the stockholders' meeting. After the doings of the executive committee have been formally submitted and approved, the most important action usually taken is the distribution of gold pieces to those members who arrived on time and sit until adjournment.

A director may retain his office after he has parted with his stock, even though he may notoriously be using his privileged station for purposes antagonistic to the corporate welfare. He cannot be removed, but merely fail of reëlection. Where power is lavishly granted and loosely restricted, it is to be expected that there should be opportunities for unlawful gains, for temptations unresisted; that directors should become in-

directly interested in contracts unprofitable to the company; that they should avail themselves of exclusive information to buy real estate at one price and sell it to the company at another or to profit by the intended declaration of a stock dividend; that they should form an inside ring to buy up the securities of a discredited connection and lease it to the trunk line on a guarantee of dividend or interest on securities bought far below their par value; or a valuable property may be leased to another corporation on any terms acceptable to directors controlling both companies, regardless of minority interests. In some States, such a transfer can only be accomplished by the purchase of the holdings of the dissenting minority at an appraised valuation. A remarkable variation of this plan for the disposition of minority holdings has been recently developed in a Rhode Island statute, which permits a railroad company controlling an auxiliary road by majority ownership to condemn the interests of the minority stockholders.

The immoral transactions of directors may injure the public who pay the freight, as they do the stockholders, whose dividends are thereby diminished or whose capital perhaps is squandered. Yet, while they may deserve punishment, acts of this character are difficult to reach, even in civil actions. The individual stockholder's interest is too small to make it worth his while to pursue an investigation which, if successful,

does not inure particularly to his benefit but to that of the stockholders as a whole; so the faithless trustee goes unwhipped of justice and his heirs inherit his ill-gotten wealth.

A director is not responsible as an individual to the corporation but as a member of the governing body upon which, by the provisions of both special charters and articles of association under general laws, all the powers of the corporation are conferred, from the moment that its members have been elected and qualified. Until its organization has been accomplished, the corporate powers remain inchoate, for the board of directors is something more than an agency; it is the incarnation of the corporation, the seat of the corporate will. A stockholders' meeting can exercise none other of the corporate powers than that of electing the members of the board, or of ratifying or rejecting the measures laid before it by the board. It may pass recommendatory or laudatory resolutions, but it cannot instruct the board authoritatively nor can it react, in any corporate sense, upon its environment.

The moral responsibility of directors would be more efficiently impressed upon their minds by legislation requiring greater publicity of their acts; for as error shuns the light, so do breaches of trust avoid publicity. The frequent occurrence, in Great Britain, of fraudulent acts of promoters and of directors toward the corporations that they controlled was brought to the attention

of Parliament, which, in 1867, passed an act requiring the public registry of all contracts in which the issue of stock was a consideration. A penalty for the publication of false statements in connection with stock issues was also provided by an act of 1890. In this country, the powers and privileges of the directors of a national bank are more restricted than are those of railroad directors.

It would seem that measures might be devised for bringing the lawful owners of a railroad property in closer association with the corporate powers and the corporate will, without disturbing the basis on which has been founded the fabric of legislation and judicial decisions concerning railroad corporations. The adoption of such measures might have the further effect of quickening the corporate conscience.

If a considerable minority of stockholders in a railroad corporation should take sufficient interest in its affairs to desire representation on the board, they would be enabled to attain that desire by some method of cumulative voting. This has been provided for by statutes and even by constitutional provisions in some of the States, yet, so far as I have been able to learn, the privilege has been rarely exercised. It has been suggested that any important action of the board shall be considered in advance of its taking effect; that meetings shall be called for the specific purpose on sufficient notice and with full information previously given as to

the character and extent of the measures proposed for consideration. It would also seem that the stockholders should have some voice in the declaration of a dividend. In 1893 the Philadelphia and Reading Railroad Company declared a dividend on preference bonds and went into the hands of a receiver a month afterward.

In Great Britain, where the distances are short and London is convenient of access from any part of the kingdom, stockholders may and do make their influence felt in the affairs of railway corporations more effectually than in this country. Semiannual meetings assist to this end by bringing the directors oftener to face the criticisms of the persons for whom they are trustees; also, on application of a small minority, even one-twentieth of the stock, a judicial investigation may be secured.

The alleged objections to increasing the sphere of action of a stockholders' meeting is that of undue publicity, that information thus obtained may be used adversely to the interests of the corporation; but it may be asked whether stockholders have not suffered more from undue secrecy. The real underlying objection to publicity, and particularly in making reports to government officials, rests upon the invitation which it offers to excessive taxation; but perhaps it might be better for legislators and appraisers to draw upon official reports for their facts than upon their own excited imaginations.

The contention that mortgage bondholders should have some influence in the management of the corporation in whose securities they have invested, at least in the election of the board of directors, is negated by the legal status of the board, which is primarily a trustee for the stockholders, as the trustees under the mortgage are for the bondholders. So long as the corporation is solvent, its creditors are not entitled to a voice in its affairs. Publicity of corporate acts, as affecting their interests, seems to be all that they can reasonably demand. It would, however, be an improvement, if the law required that bonds should bear on their faces all the mortgage limitations, and that stock certificates should set forth the voting restrictions.

The history of restrictive legislation has been brought up to a late date in Professor Meyer's excellent work on "Railway Legislation in the United States"; and the Interstate Commerce Commission, under date of 1903, has published an analytic compendium of the statutory regulation of railways in each State of the Union for the previous twelve years, which is invaluable for reference.

CHAPTER III

RAILROAD FINANCE

THE disposition to the incorporation of private capital seems almost illimitable under modern economic conditions. In 1885 President Hadley estimated that one-half of the permanent business investments in this country was owned by corporations, and the proportion is probably much greater now. There are no longer inviting opportunities for men with small capital to found enterprises under their own supervision. When they attempt it, they are at once met by the competition of corporations operating with the concentrated capital of other small investors, able to utilize the best and most recent appliances and processes, and to secure the most experienced and ablest managers. We should not underestimate, however, the advantages which the State has derived from the concentration of the savings of small investors in railroad corporations.

There is a great difference in the mobility of the capital of industrial and of railroad corporations. A large part of the capital of industrial corporations is necessarily employed in commercial credits and in the purchase of stock for manufacturing purposes. Such

assets can readily be converted into cash or removed if an enterprise should prove unprofitable. The capital of railroad corporations is mainly invested in immovable property,—in the excavations, embankments, and bridges forming its highway; in shops, station buildings, and other structures; in equipment and machinery. As the freight and passenger business is on a cash basis, only about 7 per cent of railroad capitalization is in use as a fund for current operations, the remaining 93 per cent being invested in this immovable property, to the continuing advantage of the public, even though the original investment should be entirely lost.

This fixed investment is represented by certificates of different kinds and of different potential values. That part of it which forms the basis of organization of the corporation is subscribed by shareholders. Sometimes, to invite additional capital, the original or common stockholders consent to the issue of another class of stock, which takes precedence of their own in the distribution of dividends. Generally these preferred shares are entitled to a dividend of a fixed percentage from the income of each year before the common stockholders receive any portion of it. In some instances these dividends are made cumulative and become a prior lien upon subsequent income.

When the turnpike shareholders of England found their capital insufficient for their needs, they had recourse to pledging their assets for borrowed money.

The most valuable of them was the franchise for collecting tolls. Though intangible, it was imperishable. As once defined to me by a learned friend, it was an incorporeal hereditament. The turnpike companies did not hold a fee-simple title to the highways, but only enjoyed their usufruct. This alone could they pledge, and when the railway corporations took over the other turnpike traditions, they took over this also. The same plan which had attracted the subscriptions of small investors to their capital stock was now made use of to borrow their money. The loan was likewise divided into shares called debentures. Loans of this character are permanent, the principal being irredeemable.

I have not been able to understand why the States of the Union, in accepting the English plan of building railways with private capital, did not carry the traditional analogy of the railway to the turnpike into its financial operations and prohibit the borrowing of money upon the body of the estate as security. Debenture loans have never been favorably viewed by investors in this country, though they have been occasionally resorted to by railroad companies of exceptional financial strength. Yet it would be difficult to define the additional security given to investments in loans to railroad corporations by holding a lien on the property instead of one on the income alone. The real thing to be secured is not the principal, but the interest, and that depends upon the earning capacity of the road. The

current value of the bond varies with the popular estimate of that capacity, as does that of the irredeemable debenture, and its intrinsic value in case of foreclosure rests upon the same basis. As a consequence of the existing plan of loans on mortgage, the estate of the entire railroad system of this country is to-day mortgaged for one-half of its nominal value for the payment of the principal of a funded debt at maturity; while in Great Britain three-fourths of the investment in railways is in capital stock and the other fourth in a lien upon their income. The different practice in this country has led to very different results.

Provision has been made in some charters to secure the principal of bonds at maturity by the payment annually of a certain sum to trustees to be invested in bonds of the same issue, to be deposited in a sinking fund. But the plan has proven neither profitable to the corporation nor of particular advantage to the bondholder. If the bonds are to be purchased in open market, the price to the trustees is thereby raised; and if the mortgage provides that they are to be drawn by lot at a fixed price, that depresses the salable value of the bond, for the investment in any particular bond is liable to terminate at a short date, and holders must watch for the advertisement of the numbers drawn, as interest thereafter ceases. In neither case is the burden to the borrowing corporation lessened, for the bonds in the sinking fund continue to draw interest. The cares and risk attendant

upon the management of the sinking fund until the date of maturity are further objections, and, as a matter of fact, the ultimate as well as the current value of railroad securities depends upon the net income from operations, and not upon the ultimate value of the property mortgaged.

In practice the principal of mortgage loans is never repaid from either the estate or from its income. Financiers rely upon a prospective decrease in the rate of interest on desirable investments to enable them to refund maturing loans on more advantageous terms. The market prices of well-secured bonds diminish materially as their date of maturity approaches. English debentures, on the contrary, being irredeemable, maintain permanently a more stable price. Another objection to a redeemable loan lies in the possible difficulty in refunding it at maturity. It is stated that the funded debt of railroad corporations maturing in the current year in the United States is \$192,000,000. The coincidence of financial negotiations of this magnitude with other disturbing conditions of the money market might lead to serious consequences.

The generic distinction between stock and bonds is that the former is a title to ownership and the latter evidences of debt; but the ingenuity of financiers has devised a series of gradations by which the bondholder sinks almost insensibly into the stockholder. The primary lien is that of the first mortgage, secured directly

upon all the property of the corporation. After the proceeds from this original loan have been exhausted, resort is had in periods of financial stress to a secondary loan on the same security and even to a third mortgage. To make these subsidiary loans more attractive, they are often accompanied by a bonus in stock, whose only value may be that derived from optimism; yet even hope may be transmuted into gold in the speculative crucibles of the stock market.

The income bond is nothing more than a debenture, with its lien on the net income subrogated to that of prior mortgages on the estate and made inviting by a higher rate of interest. The interest is only payable from the income available after superior charges have been provided for, and its payment really rests upon the action of the board of directors, who may reduce the remaining surplus by expenditures of an extraordinary character. Income bonds, in fact, have no advantage over preferred stock with cumulative dividends.

Among the devices to further reorganization is that of convertible bonds; that is, of bonds that carry a provision for their conversion into stock on some definite basis of exchange, at the option of the holder. This provision is of the nature of a bonus, intended to give a speculative value to the bonds beyond their intrinsic merits. Of course it facilitates the merging of prior liens into the securities of the reorganized company; yet it is a device that plagues the inventor when the stock

acquires a factitious value in speculative transactions or the property develops an unanticipated capacity for paying dividends. Convertible bonds have therefore the effect of holding down the dividend rate below the point at which the conversion would be profitable to the holder, or, by a suitable provision, they may be called in before the declaration of an increase in the dividend rate, and thus be deprived of their speculative value. Railroad companies of high financial standing also utilize this convertible feature to make an issue of short-term bonds attractive to investors at low rates of interest, though based solely on the general credit of the corporation.

Collateral bonds have a lien upon an aggregate of designated securities of auxiliary companies that have been acquired by the borrowing corporation, and are generally made payable at short dates. In this way a corporation recoups itself for its investments and still retains control of the subsidiary corporations by keeping the hypothecated securities in its own treasury. The intrinsic value of collateral bonds does not rest upon the income of the borrowing corporation, but upon that derived from the assets pledged for their redemption. If these cover valuable branch lines or feeders, even though their income should not provide for the interest, the securities may be of such importance for control as to give the collateral bonds full par value. If the undertakings should prove neither profitable nor important,

their securities are classified in stock market parlance as "chips and whetstones," and collateral bonds so secured have been merged in reorganized companies at one-third of the issuing price. The security for collateral bonds is not the property itself, but rests upon liens, which must themselves be foreclosed. This objection has been obviated by the issue of collateral trust notes, which are secured by a deposit of the hypothecated securities with trustees, with power to sell them in case of default.

A corporation may also retain its control over auxiliary undertakings by means of "blanket mortgage bonds." These are usually issued in connection with the consolidation of several corporations into one system, and to provide for extensive improvements on the property previously mortgaged rather than to devote current income to such purposes. The issue must be sufficient in amount also to provide for refunding prior liens as they mature. To avoid a decline in value by placing a large amount on the market at one time, the mortgage usually limits the issue in any one year. In case of insolvency, such bonds are more seriously depreciated than the securities to whose liens they are subrogated. As their interest is derived from the surplus income above all prior charges, they are, when first issued, not of much greater intrinsic value than preferred stock; but if the mortgage be drawn with care and the property judiciously administered, the blanket

bonds become intrinsically more valuable as the underlying loans mature.

The securities of auxiliary enterprises are sometimes more valuable than those of the corporations controlling them. This is illustrated in the case of bridges and tunnels for the passage of trains across great rivers, as the bridges across the Mississippi at St. Louis, and the tunnels now being excavated for the Pennsylvania Railroad Company at New York, if that were an independent enterprise. Great terminal stations are in the same category. Belt lines around large cities, giving access to many flourishing industries, are also to be considered as valuable securities; though if they are built through the intervention of independent companies and should become unprofitable by the failure or removal of the industries that they were intended to serve, the companies operating them under lease would perhaps seek to be freed of them.

The necessity for replacement of antiquated equipment, due to the general introduction of improved appliances for safety and economy of operation, often calls for large expenditures, which are provided for by issuing chattel mortgages on the new equipment, known as equipment trust notes. As such property suffers continued deterioration, the principal of the notes is returned in annual instalments within the estimated life of the mortgaged property.

There are necessarily three stages in the existence of

a railroad corporation, its organization, the construction of its lines, and their operation; a fourth may also be attained, the stage of dissolution. It is a gradual process of financial debility, accompanied by physical degeneration. This stage was reached by many corporations after the railroad mania had passed its climax, and financial recklessness combined with fraudulent practices brought on the day of reckoning. This era of foreclosure sales ushered in the period of reorganization that began about 1870. The Southern States, after the destruction wrought upon their railroads in the Civil War, afforded a rare field for such operations.

Here is where the divergence between British and American practice has led to widely differing results. Under the British plan, the charter, the right to exist by grace of the sovereign power, is inalienable, and therefore has no value as a pledge. Only the fruits of its use can be so devoted, and hence the security of highest dignity which a British railroad corporation can pledge is its income. In case of failure to comply with its obligations to its debenture holders, its net income only can be applied to their benefit, while the management of the road remains undisturbed, subject, however, to the supervision of the courts as to due economy in the expenditures necessary for the proper discharge of its duty to the public. Under the American plan, the mortgagee acquires a vested right in the estate of the corporation, which not only subjects it to

foreclosure sale for non-payment of the principal at maturity, but also for failure to pay one or more of the instalments of interest within certain periods after they have fallen due. In default of interest to a comparatively small amount, the equity of redemption becomes forfeited, perhaps years before the principal of the debt matures. Foreclosure proceedings may be instituted upon the petition of only a small part of the bondholders, in some cases but one-tenth; or representatives of three-fourths of the issue may authorize the trustees to buy the property and to reorganize the corporation, and even to create new mortgages.

Bound up with the principle of mortgaging the body of the estate of a railroad corporation, are the peculiar functions of the receiver. From 1876 to 1879 nearly 450 railroad corporations were sold out under foreclosure. In 1893, 132 railroad companies were placed in the hands of receivers. In 1894 there were 192 receivers, controlling one-fourth of the entire capitalization of our railroad system, with resulting foreclosure sales and reorganizations. By 1903 the situation had so far improved that there were but 27 roads in the hand of receivers, of which 9 had been so placed during the year, and none of these was over one hundred miles in length. Yet there were still receiverships which had existed for nine or ten years.

The gradual development of the functions of the receiver of a railroad corporation has been rather in his

powers than in his duties. The receivership of this character is essentially a judge-made device, and without the direct sanction of the legislative branch of the government. Though responsible only to the court, the receiver is really actuated by the advice of the counsel for the trustees, or perhaps by more indirect influences exerted by parties interested in a desired reorganization. Even one railroad company has been made receiver of another. On application of the trustees under the mortgage in default of interest, the corporation is summarily divested of the management of its affairs, and its estate, valued perhaps at many millions, is handed over to a creature of the court. This may be done when the corporation is not even in default. A railroad corporation has been thus dispossessed of the control of its property on a claim for back wages of \$1000, or because shippers complained that the company was unable to do business properly.

The whole estate of the bankrupt debtor is held absolutely by the receiver until the court shall adjudge a final decree of sale, and what he cannot do with it depends upon the will of the court, "broadening slowly down from precedent to precedent." He is unassailable by the creditors of the corporation. Its estate is free of all their claims pending the receivership, and, with this fresh balance-sheet, all assets and no liabilities, the receiver has the basis for unimpaired credit, which is freely utilized for liberal expenditures on the property,

after payment of court expenses and lawyers' fees. He may devote any surplus income not only to the recuperation of the property, but also to the completion of an unfinished part of the line or to permanent improvements. He may even undertake the construction of new lines, and for such purposes may issue receiver's certificates to the amount of millions of dollars, that become a lien upon the bankrupt estate of superior dignity to the mortgage on account of which the foreclosure proceedings had been instituted.

The bankrupt railroad companies have themselves been made beneficiaries. The ægis of the courts has been interposed between them and their creditors on their own petition, and their officials continued in office as receivers, by which means they were spared much annoyance, and leisurely negotiated a compromise of their pecuniary obligations. These friendly receiverships were adapted to other useful purposes; as to keeping bondholders at arm's length while the property pledged to them was utilized as the basis for issuing receiver's certificates with which to extend the line in time to save a land grant.

The opportunity for ample fees to all concerned on either side of the case, as well as to the receiver himself, and the added dignity of the court as an irresponsible trustee of a valuable railroad property, are strong temptations to delay the foreclosure sale as long as practicable. The receivership of the Vermont Central

Railroad Company lasted for twenty-two years. For all that time the respective rights of the parties interested may remain undetermined; but with continuing benefit to the members of the court, except, of course, to the bench. Even the judicial office acquires additional importance from the unrestricted control of a great estate with the incidental features of authority and patronage.

Bankruptcy proceedings against railroad companies are usually conducted in the federal courts, and it is desirable that they should be conducted upon generally accepted principles. This is not the case. Each district or circuit court has established its own rules of procedure, and, since the creation of circuit courts of appeal, the prospect of an ultimate harmonizing of all these rulings is hopelessly deferred; for now there are nine courts of last resort in receivership cases, instead of one. Although a legislature is forbidden to pass laws obstructing the access of suitors to the courts or impairing the obligations of contracts, these prerogatives have been freely exercised by federal courts without specific authority of law. Suitors against a bankrupt company were denied a jury trial. Their only recourse was by petition, and the permission to sue was by the grace of the chancellor. The courts have arbitrarily fixed dates of outlawry for valid claims arising prior to the receivership. Even the taxing power of a State has been defied and its officers fined and imprisoned for attempting to levy upon property in the hands of a

receiver, without the State being able to find a remedy.

It is questionable whether the hardships and the occasional injustice that stockholders and unsecured creditors suffer through receiverships and foreclosure sales ought not to bring about some modifications of the laws and precedents providing for the liquidation of a railroad corporation. If the intervention of a court becomes necessary to protect the creditors' interest in the estate, it does not seem also necessary that the officer to whom that protection is assigned should be authorized to issue prior lien certificates in excess of the proceeds of foreclosure sale. At least, it should be made impracticable to place a receiver in charge of the property of a solvent corporation.

For a long time legislatures were coy about interfering in railroad receiverships, mainly because such cases were for the most part in the federal courts. After an acquiescence for over thirty years in this exercise of power by equity courts, some of the legislatures began tentatively to limit their jurisdiction by statutes, asserting the right of suit against a receiver in the law courts, without the permission of the chancellor, in certain classes of claims, as for damages, wages, or materials. An act of Congress, in 1887, established the rule that receivers might be sued in any court of competent jurisdiction, without leave, also that receivers should conform to legal regulations of the States in which the

property was situated. In 1899 the Texas legislature passed a comprehensive act which recognized receivers of railroad corporations as State officials, and defined their qualifications, duties, and powers. No Texas company could apply for a receiver. The priority of certain classes of claims antedating the receivership was fixed ahead of the claim for which the receiver had been appointed, and the purchaser of the property at foreclosure sale was made subject to suit for such claims. Receiverships were to terminate in three years, unless prolonged by appeals. This law has apparently been without substantial effect, as such receiverships are usually granted by the federal courts upon petition of mortgage trustees, citizens of other States.

The opportunities that the receivership system has afforded for secret and illegitimate measures, to the detriment of judgment creditors and even of bondholders, can only be surmised. The conditions are so favorable for their concealment that such underground workings are rarely revealed, but even with honest management, which is oftener the rule, I think that all disinterested persons who have had the opportunity to form an opinion must arrive at the conclusion that the English system is more conformable with the interest of the public in insuring the continuance of good service under financial embarrassments, is less oppressive to the corporation in preserving its equities, and equally conservative of the claims of all creditors in their order of priority.

A railroad corporation, not being a natural person, may after dissolution enter upon a reincarnation in this world, a reorganization. Reorganization agreements are virtually supplementary proceedings to foreclosure sales, in which the stockholders and general creditors can take no part except substantially on the terms required of them. Such agreements have no formal recognition in railroad legislation; yet they serve a valuable purpose when they are resorted to in order to avoid the prolonged litigation and expense attendant upon receiverships, and substitute a plan for administering and liquidating the affairs of a bankrupt corporation in which all interests are suitably represented.

In bringing about a reorganization, diverse and frequently conflicting interests are to be harmonized. Of course the liens of superior dignity are first to be recognized, either by maintaining their priority when they are not active in the reorganization proceedings, or as stockholders when they are. Where interests subordinate to the active factor are given any interest in the reorganization scheme, that interest is scaled down in proportion to its subordination, or the active element takes to itself, in addition to a share of the common stock, sufficient to give control, a preference in bonds or in stock of a higher grade. Reorganization proceedings usually include the consolidation of several corporations, some of which may not be bankrupt, but collaterally associated with the principal corporation

that is in default. Where these are links in a continuous line, or are feeders to the trunk line, such a consolidation is in the public interest, if the recapitalization be not excessive.

Stock is legitimately issued at values below par in the merging of the stock of several companies into one, in order to equalize their prior market values in the stock of the consolidated corporation. The exchange of bonds for a proportionately larger amount of stock is also legitimate when the bonds are an underlying security of this character, or bear a comparatively high rate of interest, as it lightens the burden on the corporation in times of financial stress and transfers it to intervening periods of prosperity. The reorganization of the trunk line southward from Washington to Atlanta, Birmingham, and the Mississippi River, with its collateral feeders, as the Southern Railway Company, was a case in point, where a great benefit was conferred upon the territory through which it passed, and on a financial basis which has been justified by the results. The reorganization of the Erie Railroad Company is a similar instance of the merging into one large corporation of several affected by the same public interest as a trunk line, but the capitalization in this case was rather too excessive to be made profitable under prevailing conditions as to volume of traffic at the current rates.

Considerable skill in such matters is of value in plac-

ing the reorganization of a bankrupt corporation on a substantial footing, especially where many interests are involved, as in bonds of differing priorities upon auxiliary lines of differing value intrinsically and as feeders to the principal line, some perhaps indispensable to the success of the reorganization as a whole. Cash capital is a requisite in discharging minor claims, for legal expenses and perhaps to get rid of troublesome intervention. These considerations have developed a class of promoters in connection with such schemes, men with experience and capital and of recognized probity, who have deservedly won a reputation as reorganizers that is well worth paying for by those who have such measures in hand. For only by careful consideration of all the conditions affecting the proposition can they be so coördinated as to become properly unified in the new scheme, particularly where the consolidation of many companies is to be accomplished. When this is done upon a conservative estimate of the combined earning capacity of the corporations consolidated, with sufficient cash capital provided to secure their being put in an efficient condition for business and a safe margin of net earnings above guaranteed interest, railroad enterprises which have become so broken down as to be an incubus upon the territory which they were intended to serve have been made profitable investments and of enhanced public benefit.

Reorganizations of this magnitude are made effective

through the medium of the trust companies which have become prominent in recent financial operations, largely because of their usefulness in forwarding schemes outside of the legitimate field of incorporated banking companies. They are not only the medium for making the exchange of the securities of the new corporation for those of the companies merged into it under the reorganization agreement, but are also utilized as agencies for the sale of the new securities to persons seeking such investments. The exchange of such securities is usually guaranteed by a syndicate of capitalists, who are rewarded for thus insuring the success of the new enterprise by a substantial percentage of its securities.

As is the case in the primary organization of a railroad corporation, there is always a temptation to cross the line which separates right dealing from wrong doing in carrying through these reorganization schemes, in which the promoter is the head and front, if not the moving cause. Consolidation schemes of merit have been so loaded down with promoters' bonuses and with stocks and bonds at inflated values, that they were with difficulty kept in an apparently solvent condition long enough for the parties on the inside to unload them upon a confiding public.

In referring to the abuses incident to some reorganization schemes, I recognize that through this instrumentality a large part of our railroad system has been virtually reconstructed since the period from 1870

to 1890. The property of the companies which went into bankruptcy had not only depreciated in value financially, but had also deteriorated in its physical condition. Heroic measures were required to rejuvenate them in both of these respects, and the recapitalization also afforded the means for bringing them up to the best existing standards of safety, economy, and efficiency in operation. But I believe that this regeneration could have been accomplished with less misfortune to stockholders and probably with a less subsequent charge to the public in the way of freight and passenger rates, had it not been for the disregard of the English principle that only the usufruct of the estate could be pledged for loans.

In England a period of reorganization followed upon the collapse of railway speculation in 1850, but as only the income of the railways was pledged, that alone could be affected by proceedings in bankruptcy. Foreclosure sales were therefore not practicable; the management of the company in default was not disturbed until a reorganization had been effected; the net income in the meanwhile was paid into the court; receiver's certificates were unknown. The statutes provided that when a certain proportion, say two-thirds, of the stockholders, debenture holders, and general creditors agreed on a plan of reorganization, they might petition the court for a hearing at which all in interest might be present. Whatever value might remain in the equity of redemption was

recognized, and, as all the proceedings were in public and the approval of the court was necessary, overcapitalization in the reorganized company was rendered difficult, and the objectionable features of a voting trust were avoided.

A voting trust is a device for retaining control of the management of a corporation in the hands of a chosen few, and is really an irrevocable proxy. Under such a trust, the stockholders assign their voting power to the designated trustees for a term of years or until the payment of interest or dividends is begun on a certain class of securities. The stock certificates are exchanged for trust certificates on which dividends are distributed and which are transferable on the same conditions as the stock certificates. The purpose is to secure the success of a predetermined policy whose accomplishment cannot be assured within a brief period, and which might be thwarted by a change of management. Such voting trusts are secretly planned in the interest of certain classes of securities, usually to forestall or prepare for a foreclosure, or to secure a reorganization that might be defeated by the purchase of a control in behalf of an antagonistic interest.

A voting trust is the seat of irresponsible power, practically unlimited by the principle of *ultra vires*, and is held in disfavor by the courts, as a dissociation of the voting power from the ownership of the property. There have been cases in which a voting trust has been dis-

solved on the application of a certificate holder, and in a recent case in New York the power of the courts to review the acts of a reorganization committee was maintained, irrespective of general or specific surrender of rights by depositing security holders; also the personal liability of its members was asserted, if they had acted in bad faith to the detriment of depositors.

The permanent control of a railroad corporation is accomplished by depositing a majority of its stock with a holding company. This plan is utilized as an indirect means for the consolidation of several companies, by the ostensible sale of sufficient shares of each company to a corporation formed for that specific purpose. This device has been expanded, in the notable instance of the Northern Securities Company, to controlling the operations of rival lines extending from Chicago to the Pacific Ocean. The recent decisions in this case have not been directed to its character as a holding company so much as to alleged violations of the federal laws regulating interstate commerce.

The public welfare is more injuriously affected by the excessive capitalization of railroad companies than of industrial corporations. The stock issues of the latter are fictitious evidences of wealth in so far as they exceed the productive capacity of their plant. Such issues are like a fiat currency, which eventually sinks to its specific level in the exchanges of the world. Railroad securities are based on the productive capacity of the people

who use the road, and an overissue only becomes fictitious wealth when the charges on the people's traffic cannot be made to produce an adequate dividend fund.

Watered stock is stock issued as fully paid up, when in fact its full face value has not been paid into the treasury of the corporation. It may be issued either in payment for property taken at an overvaluation, or issued at a discount to contractors, or as compensation for services or expenses incurred in promotion. Another variety of stock-watering is resorted to where the net income available for the payment of dividends is far in excess of the ordinary rate. In such cases, the increased earning capacity of the property is capitalized by the issue of additional stock as a dividend. The effect is to reduce the nominal rate of dividend, while increasing the value of the original holdings of stock. Constitutional provisions declaring overissues of stock or bonds invalid have been nullified by judicial interpretations, as being too sweeping in their effects upon innocent investors. What is needed is a preventive rather than a remedy. This is attempted by the Massachusetts law prohibiting the use of stock as a bonus in connection with a bond issue, and providing that no railroad corporation can declare a stock dividend or issue stock certificates unless for cash paid into its treasury.

Provisions for the prevention of illegitimate issues of stock have been set at naught by the issue of an amphibious security known as interest-bearing scrip. This plan

was originally devised to tide over a season of business depression by temporarily funding current liabilities. It has also been resorted to as a means of evading legislative prohibitions as to watering stock. For this purpose, the New York Central Railroad Company first issued to its stockholders \$20,000,000 of interest-bearing scrip to represent net income alleged to have been diverted from the dividend fund for a long period and invested in extensive improvements of the property. Some time afterward this issue was quietly exchanged for a new issue of stock at par, being actually a stock dividend which nearly doubled the capital stock. The Chicago, Rock Island, and Pacific Railroad Company, after paying 9 or 10 per cent dividends for several consecutive years, issued a stock dividend of 100 per cent, and on this increased capital stock 7 per cent dividends were paid for six years; but from 1889 to 1893 it paid but 4 per cent, which, however, was still an 8 per cent dividend on the original capital.

The underlying inducement to such an increase of capitalization in a prosperous company is the popular prejudice against nominally high dividends. By paying a dividend apparently not higher than the legal rate of interest, the board of directors seeks to allay such antagonism and to protect the net income of the corporation from reduction by legislative regulation of rates for that purpose. This motive for making stock dividends would not exist if a company with a fine business

was permitted to divide among its stockholders all the net income fairly earned; nor would the necessity for curtailing expenses in a period of business depression be so urgent as when efforts were continued to earn a nominally fair dividend on the increased stock issue. The laws of New York now restrict the increase of capital stock by requiring the assent of two-thirds of the stock at a meeting called after twenty days' notice and with the subsequent approval of the Railroad Commissioners. The publicity attaching to this course of itself deters an unwarranted stock dividend. The law of Massachusetts only permits an increase of capital upon the approval of the Board of Railroad Commissioners, the new stock to be first offered to stockholders at auction at not less than par.

Before the days of great industrial corporations, dealings in railroad stocks and bonds provided the principal business for the stock exchanges. Though perhaps seven-eighths of such transactions are speculative, the stock exchanges have become the barometers of the international money markets, and, notwithstanding the abuses to which its methods give opportunity, the advantages cannot be ignored that the stock exchange affords for the expeditious purchase or sale of corporate securities in any quantity, at the best market prices. Without its daily quotations, many of these securities would be unavailable as banking collateral, and the legitimate extension of credit would be seriously cur-

tailed. Multi-millionaire capitalists would soon come to a standstill in the development of projects of great prospective value to the public, if they could not enlist the aid of small investors through the agency of the stock markets. It is by the resale of all but a controlling interest in properties of approved earning capacity that they provide themselves with the means for undertaking others in which they bear the initial risk themselves.

The concentration of capital in corporations has facilitated transactions in their securities of great magnitude, with correspondingly increased opportunities for abuses in speculation. At one time, improper financiering became so common as to discredit the commercial integrity of our large moneyed corporations and financiers, as compared with institutions and capitalists of similar repute in European countries. Yet legislation is of little effect against speculations of an objectionable character that do not openly violate the law, and it is more likely to restrict the legitimate exercise of sound business judgment in the employment of capital, which is the basis of commercial prosperity. Commercial crises have been far more efficient in checking excessive speculation, and, in recent years, they have served to discountenance the speculative reorganization of corporations.

Attempts have been made to determine the overcapitalization of the railroad corporations of this coun-

try by a comparison of the face values of the securities representing their capitalization with their market values. A very elaborate report of this character was made by the Interstate Commerce Commission as of June 30, 1900, with the following results:—

	FACE VALUE	MARKET VALUE
Capital stock . . .	\$6,000,000,000	\$3,250,000,000
Funded debt . . .	5,700,000,000	5,100,000,000
Total	<u>\$11,700,000,000</u>	<u>\$8,350,000,000</u>

On this basis the capital stock of our railroads is worth but 50 per cent of its face value and the funded debt 90 per cent, while the total capitalization is worth but 71 per cent.

The generally accepted opinion among financiers is that the value of a railroad property should be estimated on its net income, as that fixes the market prices of its securities. Acting upon this opinion, it is not a difficult matter to arrive at the possible overcapitalization of the railroad system of this country. In 1903 the permanent investment in railroad securities in the United States was represented by:—

Stock	\$6,155,000,000
Bonds	5,425,000,000
Other funded debt	1,020,000,000
Total capitalization	<u>\$12,600,000,000</u>

or relatively, in stock 49 per cent, in bonds 43 per cent, and in other funded debt 8 per cent. This capitalization exceeded one-eighth of the total estimated wealth

of the country. The total mileage covered by this capitalization was about 200,000 miles, capitalized therefore at the rate of \$63,000 per mile.

From this mileage there was earned a net income of \$626,000,000, after paying taxes and interest on floating debt. From this net income \$269,000,000 was paid as interest on funded debt, which was at the average rate of nearly 5 per cent, and \$166,000,000 in dividends, which was at the average rate of about 3 per cent. There remained a surplus of \$191,000,000, from which there were miscellaneous deductions of \$50,000,000. There was also an investment of \$42,000,000 in permanent improvements, and the remaining surplus amounted to nearly \$100,000,000. So that on the basis of net earnings the railroad system of the United States is not overvalued in its capitalization. Although in 1903 44 per cent of the total capital stock received no dividends, the average return on the dividend-paying stocks was less than 6 per cent. The funded debt showed to better advantage. Less than 5 per cent of the total was in default, and the average rate of interest secured on the remainder was over 4 per cent.

The difference between British and American methods of railway financiering in their relative preference for borrowing on debentures or on mortgage bonds characterizes also their different disposition of net income. In England, the tendency is to distribute the net income in dividends "up to the hilt," as they say, and to provide

for improvements by issue of additional shares of capital stock. Consequently there is a continual increase of capitalization per mile and, if the rate of dividend is to be maintained, no scheme of improvement can be favored without it offers the promise of immediate net returns at the same rate upon its cost. In the United States, improvements are largely provided for from net income, to the immediate prevention of increased dividends; but on this plan improvements are entered upon by which the public convenience is immediately served, even should the prospect of increased dividends be thereby indefinitely deferred. On the English plan, the dividend rate may fluctuate materially from year to year, while dividends on the additional capital must be derived directly from the current traffic charges. On the American plan, the dividends are held at a more uniform rate, and the cost of improvements is made at the expense of the stockholders.

From 1863 to 1883 the capitalization of English railways increased from \$160,000 per mile to \$210,000, an increase of \$45,000 per mile, or 16 per cent, in 11 years. From 1888 to 1903 railroad capitalization in the United States increased from \$56,000 to \$63,000 per mile, being an increase of but \$7000 per mile, or 12 per cent, in 15 years. Considering the improvement in the physical condition, terminal facilities, and train equipment of the railroad companies in this country since 1888, the increase in capitalization compares very

favorably with that of the railway companies of Great Britain.

In 1901 the paid-up capital of the railway system of Great Britain was reputed to amount to about \$5,800,000,000, or \$264,000 per mile. This is about half of the total capitalization of the railroad system of this country, in 1903, on a basis of \$63,000 per mile. The investment in British railways was divided as follows: ordinary shares, 38 per cent; guaranteed and preference shares, 36 per cent; loans and debentures, 26 per cent; while that in our own system was divided: stock, 49 per cent; bonds, 43 per cent; other funded debt, 8 per cent. The capital account of the British railways was increased in 1901 over \$94,000,000, an increase of 1.62 per cent, divided about one-fourth in ordinary shares, one-fourth in debentures, and one-half in guaranteed and preference shares. The increase in capital of the railroad system of this country in 1903 was about \$466,000,000, or 3.7 per cent, divided about one-fourth in stock, one-half in bonds, and one-fourth in other funded debt. This increased capital included the cost of construction of over 5000 miles of additional road, so that the increased capitalization was only \$885 per mile of road. There was little or no additional mileage constructed in Great Britain in 1901, yet there was a virtual addition to capital per mile of about \$4000.

In 1850 the wealth of this country was estimated at \$5,000,000,000, of which one-eighth to one-fifth was

in public and corporate securities. In 1900 the total wealth was placed at \$93,000,000,000, and at present at a round \$100,000,000,000; an increase of twenty fold in little over half a century, and the amount represented by the public debt and by corporate capitalization is valued at \$25,000,000,000. Railroad securities amount to about one-half of this, equally divided, as already stated, in stocks and bonds, and about one-sixth of this railroad capital is owned by railroad companies.

In 1897 this railroad capitalization was distributed among 950,000 stockholders and 300,000 bondholders, about equal in number to the railroad employees. In 1894 the Boston and Albany Railroad Company, with 5903 employees, had 8220 stockholders. In 1901 its largest stockholder held 3000 shares; 4645 persons held less than 10 shares each. In 1902 there were 29,000 stockholders in the Pennsylvania Railroad Company. In 1893 the Pullman Car Company, with 4497 employees, had 3200 stockholders, of whom 1600 were women and 300 trust estates and institutions. The average holding of Pennsylvania Railroad stock in 1889 was 109 shares; in 1903 it was only 60. The New York, New Haven, and Hartford Railroad Company's stockholders increased in number from 3545 in 1887 to 11,032 in 1894, more than keeping pace with the increase in capital. The investments of savings-banks and insurance companies in railroad securities are in

trust for hundreds of thousands of depositors and policy holders.

In the next chapters I shall discuss the character and extent of the property in which this vast amount of capital has been invested, and of the legislation affecting its creation and its operation.

CHAPTER IV

RAILROAD CONSTRUCTION

As the character of the incorporation of railroad undertakings in England and in the United States has been diversely influenced by political and social conditions, so these have likewise induced divergent methods of railroad construction and operation. Railroad construction in this country has conformed to three successive stages of social development which have followed each other from the Atlantic coast to the Western prairies: the stages of pioneer settlements, of a migration movement, and of a resident industrial and commercial population. The respective frontiers of these successive stages have been defined by the Allegheny Mountains and by the Mississippi River.

The enterprises first undertaken extended from the Atlantic ports into a vicinage that was fairly well populated and where the social conditions somewhat resembled those that at the same time were influencing the early railway enterprises of England; therefore English experience was drawn upon in their original conceptions of railway incorporation and finance.

But in other respects the similarity ceased. The Atlantic coast region depended mainly on its seas and navigable rivers for commercial communication. It had no well-constructed highways nor a connected system of canals.

In another important respect, the English methods of construction were differently affected. From the beginning there was no lack of engineers with practical experience in the location and construction of canals and roads, and of bridges, viaducts and other structures of masonry. Furnished with ample means, in a country made everywhere accessible for transportation of building materials by water or by highways, and with plenty of skilled workers in stone and brick, the English engineers built for all time. Their locations, with gentle curvature and long easy grades, their road-beds, well-drained, with sodded slopes or walled in with masonry, command our admiration to this day.

In the United States professional engineers were so few in number that they were called on to direct the work on several enterprises at the same time, and the details were necessarily left to subordinates, who learned as they went along. Serious engineering problems they avoided, and there were no monumental structures for them to seek to emulate. The lack of capital made economy a prime essential, so they located their roads with curves and grades which an English

engineer would not have permitted. Masons were scarce and quarried stone expensive, so bridges and other structures were built of timber by house carpenters, expeditiously and cheaply.

As the roads from Baltimore and Philadelphia were extended into the Allegheny Mountains, the necessity arose for construction on a far more expensive scale than in the seacoast region, and they had to be assisted from the public treasuries. The rival route from Albany followed the easy grades of the Erie Canal to Buffalo, flanked the Allegheny Mountains along the shore of Lake Erie, and reached Chicago through the prairies. Once the Allegheny Mountains were crossed, the whole country to the west was favorable to cheap construction, as was also the case in the plains covered with pine forests which extended southward from the Potomac River, east of the Blue Ridge.

In the broad expanse from the Atlantic Ocean to the Rocky Mountains and from the Great Lakes to the Gulf of Mexico, there was but one really difficult and expensive region for railroad construction, that occupied by the mountain backbone which marks the eastern edge of the great central drainage basin of the Mississippi. Not only was the surface of the country moderately level, it also supplied building materials in abundance. But long distances were to be covered in a region of pioneer settlements, given only to agriculture, and two essential requisites for

railroad construction were scarce, labor and money. The lack of these spurred the invention of engineers and of financiers. The former resorted to physical makeshifts, as the latter did to pecuniary ones.

In this period, the railroad promoters in the Gulf States and in the Middle West obtained their first aid from the general government, indirectly through the State legislatures, by pledging with European financiers the credit of the States secured by the so-called Three Per Cent Fund, which was provided by the sale of public lands within their borders. Then recourse was had directly to land grants, the first case of the kind being for the Illinois Central Railroad Company, in 1850. When railroad building passed beyond the Mississippi, it was sought to realize the dream of a transcontinental railroad. The prairies that stretched westward toward the Rockies were opened up to immigration and furnished opportunities for aggrandizement which must have made the promoters who profited by them almost to regret their own moderation. It was not the gift of princely domains, but of kingdoms, that they received.

The Rocky Mountains presented even a greater barrier to reaching the Pacific Coast than the Alleghenies had to reaching the Mississippi basin; but by this time American engineers had acquired such experience and skill that no physical obstacles could daunt them, if they were supplied with men and means.

In crossing the great prairies they had learned to build railroads at the rate of a mile or more a day; and now, in the passes and cañons of the Rockies, they overcame difficulties by economic expedients that European engineers borrowed later in building across the Alps. The goal was at length in sight, and when the last rail was laid that joined the Union Pacific to the Central Pacific Railroad, the people of the United States were bound together by ties even stronger than the iron bands which stretched from ocean to ocean. The victory of civilization over the wilderness was won. The builders had builded wiser than they knew, for they had conquered for their countrymen the supremacy of that ocean upon which the Spaniard Balboa had looked out three centuries before.

The prairies thus made accessible to the crowded peasantry of Europe now feed their kindred across the sea. The mountain cañons threaded by the skill of the engineer are pouring their treasures into the money markets of the world, and our ports upon the Pacific are destined to harbor fleets whose commerce will make America face about to the Orient, as Europe faced about from the East to the West when Columbus led the way across the Atlantic. Let us not then begrudge to the transcontinental pathfinders the fortunes that they made in preparing the way for the millions who have found comfort and even affluence in their footsteps. Let us rather condone their methods

in view of the great public benefits which have resulted from their enterprises, undertakings so extraordinary that they bordered upon the impossible in the opinions of those who looked on and risked nothing.

The railroad bankruptcy which followed upon the completion of the first transcontinental lines was not due to national exhaustion nor to baseless speculation. We had not overbuilt ourselves, but had built too rapidly for immediately profitable results. The railroad builders through the prairies were in debt, as were the immigrants who had followed them as they threw down their rails upon the fertile soil. They were both mortgaged to the utmost, and when the crash came, they suffered alike from overconfidence. The succeeding period of reorganization was, it is true, one of largely increased capitalization, but the increase was not mere inflation. Every reorganization was the means for introducing fresh cash into exhausted treasuries, and such funds were largely devoted to physical improvements on so extensive a scale as virtually to amount to a reconstruction of our railroad system.

It so happened that just in this period, from 1870 to 1880, the discovery by Sir Henry Bessemer of an improved process for making steel had revolutionized that industry in Europe. This discovery has had the effect upon the material civilization of our times that the discovery of bronze had in the Stone Age and

that of smelting iron in the Bronze Age. To this method of steel-making we owe the smooth tracks without which high speed would be impracticable, and to it, in connection with the use of compressed air in making subaqueous foundations, we also owe the possibility of building such bridges as span the Niagara, the Mississippi, and the East River at New York. All these improvements only became possible at the time that the roads in this country were going through bankruptcy, and the coincidence of this calamity with their advent caused the era of financial reorganization to be also one of physical reconstruction. The disjointed railroad companies occupying the national highways were not only joined together legally, but also practically in a way that was before impossible. The New York Central route was carried across the Niagara River, and the railroads were connected from ocean to ocean for the first time by bridging the Mississippi at St. Louis.

Another important feature of the period of reorganization was the alteration of the gauge of the Southern railroads. By the concerted action of the railroad managements of the South, some 25,000 miles of track was changed to conform to the gauge of the Northern roads. This greatly facilitated the interchange by land of heavy commodities that before went by sea. It was an incentive to the cotton manufacturing industries to move southward along the

eastern foothills of the Blue Ridge, and it awoke into renewed activity the dormant coal and iron enterprises of Tennessee and Alabama. This change of gauge has had an underlying effect politically throughout the Southern States. As we carry to the credit of the transcontinental pathfinders the transformation of our Western wilds into civilized States, so should we credit the financial underwriters of the period of railroad reorganization with the reconstruction of our national railroad system.

X The Union Pacific Railroad Company was incorporated under a federal charter, in 1862, though no work was done under it until 1865. By 1869, 1038 miles had been built to a junction with the Central Pacific, 883 miles from the Pacific coast. This line remained the sole transcontinental route until 1881, when the Southern Pacific and the Atchison, Topeka and Santa Fé roads made a connection in Arizona; but the route along the Southern frontier, from California to the Gulf of Mexico, was not completed until the following December. The Northern Pacific Railway, to Puget Sound, was opened in 1883. A virtually parallel line was brought about by the combined control of several distinct corporations under the Great Northern Railway Company, which was opened to the same waters on the Pacific coast in 1893. Under the policy of government ownership there could have been no such magnificent manifestations of individual

enterprise, yet most of them have been through the ordeal of bankruptcy.

The means of internal communication had been so well supplied in England through the medium of turnpike and canal companies that when capital was required for the construction of railways there was no thought of them as public facilities entitled to state aid. The lack of such facilities of an artificial character in this country had been felt by the people even before the formation of the federal government. This feeling gave birth to a scheme for a very considerable system of national roads beyond the Alleghenies, to be built at the public expense. The advocates of the project made it a political issue which at first met with popular favor, but was signally defeated by the election of General Jackson to the presidency. From that time there was no serious attempt to induce the direct aid of the general government for any private project for works of internal improvement until political exigencies were made available to secure that aid in the construction of the transcontinental railroads. But works of internal improvement had to be carried on in the public interest, and private capital could not be obtained sufficient for such enterprises, if of considerable magnitude. The success of the Erie Canal as a State undertaking turned the attention of promoters to working up a popular interest in their measures, which supported their efforts to secure aid from the State governments.

The assistance given to the Potomac Company by Maryland was perhaps the earliest instance of State aid to a private undertaking for a work of internal improvement. Upon the failure of this company, its assets were taken over by the Chesapeake and Ohio Canal Company. When the subscription books of the Baltimore and Ohio Railroad Company had been closed, in 1827, out of the total subscription of \$4,178,000, \$1,000,000 had been subscribed equally between the State of Maryland and the city of Baltimore. There was an intense rivalry between the railroad company and the Chesapeake and Ohio Canal Company. The canal company had occupied the only practicable right of way for 12 miles up the Potomac River to Harper's Ferry, and, after a cross-fire of injunctions, had successfully contested the efforts of the railroad company to share it. In 1835 the canal company had about exhausted its means, and applied to the Maryland legislature for assistance. The friends of the railroad company for a while opposed this measure bitterly, when suddenly there was a change of attitude. Both parties joined in carrying through a bill for aiding works of internal improvement to the extent of \$8,000,000, of which \$6,000,000 was divided equally between them, and the remainder went to some local projects whose friends had to be harmonized. The bill also authorized a further subscription of \$300,000 by the city of Baltimore to the Baltimore and Ohio

Railroad Company. Upon the bill becoming law, the railroad company subscribed \$266,000 to the stock of the canal company and the right-of-way matter was satisfactorily adjusted; all of which goes to show that our grandfathers had fathomed the possibilities of political log-rolling.

A spirit of feverish activity ensued in furthering schemes of internal improvement by the States. Pennsylvania became financially embarrassed; Michigan incurred an immense liability without any adequate security; Missouri spent over \$30,000,000 with only about \$6,000,000 to show for it; other States incurred liabilities beyond their power to pay, and the fair fame of the country at large was tarnished in the eyes of impoverished foreign investors, who could not understand the basis of federated sovereignties on which our general government rested. Both forms of government had failed in carrying on works of internal improvement, which were thereafter left to be undertaken by private corporations.

The large areas of public lands in the States which had been formed out of the territorial domains had already attracted the attention of the promoters of schemes of internal improvement in those States. In 1817 Congress reserved 5 per cent of the net proceeds of the sale of public lands in Mississippi for building roads and canals in that State, of which three-fifths were made subject to appropriation by the legislature.

In 1829 the State utilized this fund for negotiating a loan. This was found to be too slow a process for the vigorous prosecution of the work, and Congress was therefore induced to make direct grants of the public lands instead. In 1832 the State of Indiana made such a grant the basis of a loan for the construction of the Wabash and Erie Canal. Lands were next granted directly to a private corporation to build a navigable canal from Chicago to the Illinois River.

The assistance extended by the general government to the States for the construction of canals was indirectly utilized in Indiana in behalf of railroad enterprises. A bill was passed authorizing the Board of Canal Commissioners to borrow on the faith of the commonwealth \$1,400,000 in Europe or elsewhere, not exceeding the rate of $4\frac{1}{2}$ per cent, reimbursable in thirty to fifty years, pledging the 3 per cent bonds for payment of interest. These bonds were based upon the grant by Congress of the proceeds of sale of public lands in aid of works of internal improvement. In 1836 Congress made the first direct grant of public lands to a railroad company, the Illinois Central Railroad Company. The grant was not made available until 1850, when similar grants were made to the States of Alabama and Mississippi in aid of the Mobile and Ohio Railroad Company. This example was followed in behalf of Missouri in 1852, of Arkansas in 1853, and in 1856 there was a sectional

scrambling for spoils in which grants were made to Michigan, Wisconsin, Iowa, Florida, and Louisiana.

In the period of rapid extension, railroads were largely aided by municipal and county subscriptions, paid in bonds. Local aid of this character in the States of New York and Illinois amounted to nearly \$50,000,000. Throughout the Union it probably reached several hundred millions. It was often a case of no bonds, no railroad. These bonds were disposed of by the railroad management to distant capitalists on attractive terms, and often with an inside profit on the brokerage. When the corporation failed and was sold out under foreclosure, the town or county was saddled with a debt that had nothing to represent it. This brought the question of watered stocks into notice, but the bonds had passed to bona-fide holders, and in the reorganization the burden on the people was not lessened.

In the solicitation of legislative aid, a rank growth of lobbyists sprang up, with the inevitable taint of bribery on their trail. This was especially true of the period of political reconstruction in the Southern States. Corruption ran riot in their capitols. The votes of ignorant negro lawmakers were openly offered for competition among rival promoters by the white men who held them in leash. The credit of the States was loaned and their public domain alienated for the construction of roads which were left incomplete

when the carpet-baggers fled with their spoils. Nothing was left to the natives except a heavy burden of public debt and a hatred of carpet-baggers, in which were included the Northern bondholders who had foreclosed on the mortgaged property. The debt they repudiated as far as possible, as other States had done before them, and the animosity thus engendered was afterward exhibited in hostile legislation. To defeat the machinations of irrepressible promoters, the constitutional inhibitions, which had been resorted to in nearly every State against State aid, directly or indirectly, were extended to include county and municipal governments.

During the Civil War, political considerations had induced a revival of State aid in behalf of a transcontinental railroad, and grants of the territorial domain were made on a scale before unexampled. In 1862 Congress made a grant of lands and bonds to aid in the construction of a road from the Missouri River to the Pacific Ocean. The Central and the Union Pacific Companies received a money grant of about \$25,000 per mile and land grants of over 30,000,000 acres. Other projects for transcontinental roads were similarly favored. Some adequate conception may be formed of the munificence of Congress by a comparison of the extent of the public domain thus made the basis of railroad construction with that of certain well-known State sovereignties. For instance, com-

pare the total grants to transcontinental lines of 100,000,000 acres, or about 160,000 square miles, with the areas respectively of the New England States, 62,678 square miles, of the Middle States, 104,839 square miles, of the total area of Great Britain and Ireland, 120,851 square miles, or with the size of France, 205,000 square miles. There was also loaned to the same corporations some \$60,000,000 in bonds, the most of which has been repaid with interest in the past fifteen years. In 1890 Congress provided for the forfeiture of all grants not then earned. A very considerable acreage has since been returned to the public domain; exactly how much it is not easy to ascertain.

Although these extensive grants attracted investments in the securities of the first transcontinental roads, no value attached to them in the eyes of the congressmen who voted for them. One argument in favor of such a grant was that it was an appropriation of unsalable lands in which, as a senator remarked in debate, no one took any interest except as to their locality. The matters which interested congressmen in the bills aiding transcontinental railroads were not connected with the public domain, but with the routes that were to be favored and with the novel question of creating federal railroad corporations. With the completion of these roads, there was an end to the land-grant business, which had passed through four distinct stages. From 1837 to 1850 the several

theories concerning the proper disposition to be made of the public domain were discussed and developed. From 1850 to 1857 land grants were made directly to the States; the homestead law was under consideration, as also the several projects for aid to the trans-continental roads. From 1857 to 1872 was the period of grants directly to railroad corporations, and in 1876 began the reaction which resulted in the forfeiture of the unearned grants in 1890.

As the lands were patented they became subject to taxation, though many years elapsed before they were all sold. A large part of the gross returns was absorbed in extensive advertising, in salaries, commissions, and incidental expenses; and more profit was derived from having the lands settled than from the proceeds of their sale. The Union Pacific lands, up to 1897, had averaged \$2.49 per acre and the remainder was offered at 65 cents. The early grants in the prairies of Illinois and Iowa were far more valuable to the railroad companies. The grant to the Illinois Central Railroad Company amounted to about 2,600,000 acres. The road was opened in 1855, and six years later less than half had been sold. In 1872, 400,000 acres were still on hand, and the average price received to that date was \$10.09 per acre. The price decreased to \$4.30 in 1883 and increased to \$7.59 in 1895, when but a small remnant was unsold. The government lands along the line were all taken up by the time that the

road was opened for business. Four roads across Iowa, a distance of 310 to 350 miles, received liberal grants. The Burlington and Missouri River Railroad Company up to 1888 had sold at an average of \$11.89, netting \$4,870,000 above taxes and expenses. The Chicago and Rock Island Railroad Company, on an average of \$8.81 to 1891 had cleared nearly \$5,000,000. The Atchison, Topeka and Santa Fé Company, from its lands in the Kansas prairies, received up to 1888 over \$11,500,000, paid \$1,175,100 in taxes, and netted nearly \$8,000,000. The lands in the Southern States were of poorer quality and less attractive to immigrants. The railroad companies were generally willing to dispose of them at the government price of \$1.75 per acre.

These were the means by which railroads were built from other resources than the bank accounts of the projectors. From small beginnings these enterprises had expanded into the construction of lines thousands of miles in length, with millions in public subsidies and grants of royal domains. With this expansion came opportunities for profits to capitalists in financing corporations for building roads through pathless deserts and to contractors in their construction under great difficulties. No objection can fairly be made to the acquisition of fortunes in such undertakings, if honestly acquired. Such profit-taking does not call for restrictive legislation. The State is well repaid for its investments in the rapid peopling of

the wilderness, in the marvellous development of the national resources and in the consequent increase of the national strength and prosperity.

In the wild region west of the Missouri River, under loosely organized territorial governments, far away from the seat of federal authority, the individual will was but slightly curbed by legislative restraint, and this political condition affected the minds of railroad promoters, as it did those of hunters, cowboys, and miners. The stockholders were as far away as was the seat of government. In 1888 two-thirds of the stock of the Union Pacific Railroad Company was held in New England and New York, and only about 600 shares in all the region through which its lines were built. The directors held the meetings by proxy votes and the responsibility for success was placed directly upon them.

It was a most serious undertaking to enter upon the construction of a railroad for thousands of miles through an unexplored region of deserts and mountains, devoid of industries other than hunting and of population other than savages. The amount of capital required was unexampled, the risks were appalling, and the prospect of profit too remote to attract ordinary contractors. The only practicable method was for the capital to be provided and the risk assumed by the projectors, who accordingly resolved themselves into a construction company, to which all the assets of

the railroad corporation were paid as the price for building the road. This was an entirely legitimate proceeding, provided that each stockholder had a proportionate interest in the contracting company. But if the officers of the corporation conspired against the stockholders, or if the principal stockholders conspired against the minority, through the medium of a contracting company, the legal as well as the moral character of their operations assume a different aspect.

And further, assuming that all was fair between the stockholders, the third party in interest, whose national resources had been devoted to the work as being for its benefit, had no just cause for complaint provided that the railroad corporation had complied with the terms on which their aid had been granted. It was a duty which Congress owed to the people to secure such a voice in the management as would insure a compliance with these terms and, if the grant had been improvident and excessive, that responsibility rested upon the Congress that had authorized it. The supervision secured by the presence of a government representative in the board could not, however, have been very effective, when a contracting company could pay for the work of construction out of the subsidy of bonds alone.

These views ought not to be disregarded in considering the legitimacy of the profits that made multimillionaires of the members of the contracting com-

panies which constructed the first transcontinental roads. These enterprises, however, afforded opportunities for shrewd men, devoid of either patriotism or honesty, by illicit and reprehensible methods to divert the savings of investors and the liberality of the State from the purpose for which they were intended, to their own aggrandizement. The investigation of the *Crédit Mobilier* revealed the use which was made of such opportunities, not only for the illicit acquisition of wealth, but also for the corruption of public officials and for the oppression of the population of extensive regions. The original Southern Pacific Railway, built by a contracting company for \$15,000,000, is said to have cost less than half that amount to build, while the syndicate that furnished the money received \$40,000,000 in stocks and bonds.

The peculiar service of a public character rendered by railroad corporations is further recognized by legislation which forbids either the alienation or the sale under levy of its real estate devoted to that service. Yet under the franchise of expropriation, one railroad company may enter upon and condemn to its own use real estate already occupied by another. Fierce contests have arisen over the power of the State to exercise the right of domain a second time over the same piece of property or right of way, in favor of a rival railroad company; but it seems to have been established that it may do so by special legislation, even

though the value of the franchise be thereby impaired. Of course the consequent impairment of the franchise is to be considered in the condemnation proceedings, but such impairment is difficult of ascertainment. The franchise of expropriation has been recently utilized in Rhode Island by statute for the transfer by condemnation of the property rights of minority stockholders to a lessee railroad corporation owning the majority interest. It is now proposed by such use of the power of expropriation to transfer the ownership of the street railroads in Chicago to the municipality, and, if this can be accomplished, it points the way to similar action for the acquisition of railroad property rights on a still more extensive scale in the public interest.

Restrictions affecting construction have been rarely introduced into special charters beyond defining the width of the right of way. The termini are more or less definitely fixed and perhaps one or several intermediate points in the line. A sketch map of the proposed route is sometimes required, but seldom one of an approximately accurate location. In Massachusetts such a map is required to be submitted to the authorities of each town upon the proposed route, with opportunity for a public hearing of parties interested; and in other States a map of the road must be filed in each county along the line. Subsequent variations of moment in the location are not permitted

without authority, and a map of the final line must be deposited with the Secretary of State. In New York, railroad projects must have the approval of the Railroad Commission after due hearing.

There has been no legislative restriction concerning the important matter of the gauge of track. Breaks between gauges of 6 feet, 5 feet, 4 feet 8½ inches, and 3 feet occurred at different points throughout the Union, even between lines owned by the same corporation in the same State. The uniformity of gauge which now prevails was voluntarily instituted by the railroad corporations for economic considerations and at a very considerable cost. The only federal legislation affecting railroad construction has been in the interest of water traffic, in requiring the approval by the Secretary of War of plans for bridging navigable streams, and in granting special charters for bridges across such streams that constituted boundaries between States.

The franchise of expropriation is as essential to the purposes of a railroad corporation as is that of tolls. Without the one, the other could not be exercised. It is only because of the public service to be rendered that this emphatic exercise of a power residing only in the sovereign enables the employees of the railroad corporation to enter private property without being liable for trespass. The ordinary farmer is much impressed by this apparent superiority to

the law. His antipathy to railroad construction through his farm, upon compensation fixed without his consent, has been adroitly utilized in jury trials and by politicians. In England, the tradition that every man's house was his castle was sturdily acted upon when it came to condemning a right of way through his land. One company paid at the rate of \$60,000 per mile through farm lands that sold at one-tenth of that valuation. Up to 1886 the investment of railway capital in lands had reached \$380,000,000, about one-twelfth of the estimated agricultural value of all the land in the kingdom. While the original cost of lands and buildings belonging to railroads in this country is estimated at about \$1000 per mile, that belonging to English railways is valued at \$20,000 per mile. There have been thousands of miles of completed track in this country that did not cost the half of that amount.

In the last decade the framework of our railroad system has become virtually complete; the annual increase of 4000 to 5000 miles is principally confined to branches and feeders to the existing lines. A brief outline of this framework helps to understand the tendencies of consolidation and its results upon the operation of the system as a whole. It is interesting to trace upon a map the outcome of this continuing combination into distinct systems of control.

In the New England States the railroad network

centring at Boston has become polarized into two territorial systems, around the Boston and Maine Railroad as a nucleus in the northern section, and around the New York, New Haven and Hartford Railroad in the southern section, with the trunk line westward, the Boston and Albany Railroad, occupying a neutral zone, separating them. The Grand Trunk winter outlet to Portland and its competing line to New York *via* New London are to be considered as intrusions of an influence external to the New England system as a whole. Along the Atlantic coast the railroads radiate from the seaports, but their consolidation with their connections has been influenced by conditions of interior competition. The aggregation of traffic from the Great Lakes has resulted in the consolidation of rival lines for this business to New York. The roads in the anthracite region have become likewise consolidated in rival interests. The competition in the soft coal traffic from the Alleghenies to the ports on the Delaware and Chesapeake bays is now restricted through a common control of the railroads engaged in it.

The ports of Charleston and Savannah long dominated the railroad system of the South Atlantic territory in connection with the direct cotton traffic to Europe and also with cheaper service by steamers to North Atlantic ports than the all-rail lines could furnish. This position of the South Atlantic ports was

protected by the obstacle to all-rail traffic presented by the break of gauge in North Carolina and at the Ohio River, an obstacle more formidable to commerce than broad rivers or high mountains. But when the gauge of the Southern roads was conformed to that of the Northern roads, the all-rail routes asserted their strength in the subsequent consolidations. Now all the roads in this region are merged into three parallel systems which ultimately converge at Washington. A similar commercial tendency has had the effect of merging the Southern roads in the States immediately east of the Mississippi River into two north-and-south systems, the Louisville and Nashville, and the Illinois Central, which diverge from New Orleans and come together again at several points on the Ohio and Mississippi rivers. The control exercised by Congress over the location of the roads across the Western prairies to the Pacific coast secured from their beginning a continuous management over each separate route, which greatly facilitated their usefulness in the development of that region and of the commerce of the Pacific coast. At the same time it restricted industries at intermediate points in their competition with those situated at the termini of each system.

The region westward from Massachusetts to the Mississippi River and southward to the Potomac and Ohio rivers is now better supplied with railroad lines per square mile than Great Britain is. Additional

railroad capitalization hereafter will be devoted more especially to providing additional tracks and improved terminals for existing lines, and probably for the electrification of the steam roads. The demand for additional local lines with increasing population will be supplied by an extension of the interurban trolley roads. The Southern States, east of the Mississippi River, are fairly well supplied with main lines, and the future construction there will be for feeders. This is likewise true of the tier of States immediately west of the Mississippi, but in the country thence westward to the Rocky Mountains and beyond, the railroad mileage will probably be increased threefold in the next decade or two.

The great commercial metropolis of Chicago asserts an influence over the tides of traffic comparable to that exerted by the moon upon terrestrial tides. The railroads of the whole Northwest, from the Great Lakes to the Rocky Mountains, have become concentrated in systems converging on Chicago, as the railroads eastward to the Atlantic Ocean have converged in systems on New York. These two cities have attained such predominating positions in the commerce of the United States that the lines connecting them are known as the trunk lines *par excellence*. As these cities influence commercially the business of every city in the region between the Mississippi and the Atlantic, so do the trunk-line rates influence the rates on every railroad in the same territory.

The concentration of traffic on these trunk lines attained such proportions as to enable great economies to be effected in the cost of the service, with much profit to the trunk-line corporations. This was particularly true of the New York Central Railroad Company and its connection, the Lake Shore Road. The remarkable prosperity which attended this combination induced the construction of a parallel system from New York to Chicago. Perhaps nowhere else has such an enterprise been undertaken simply to divide competitive traffic on the lowest existing basis of rates. The enterprise failed, and the property passed into the hands of its stronger rivals. Fortunately the increase in that competitive traffic has since enabled these roads to be operated simply as additional tracks of the New York Central system.

St. Louis has long maintained commercial control over the region beyond the Mississippi and south of the Missouri River, though the strength of Chicago's position is shown by the fact that every line into St. Louis from the west has been compelled to have its own independent means of access into Chicago. It would seem that the public necessity for additional trunk lines between the Mississippi River and the North Atlantic ports had been supplied; yet now the Wabash system is seeking an outlet to the Atlantic, after having successfully invaded the Pittsburg stronghold of the Pennsylvania system. The closely associ-

ated system of the Missouri Pacific Railway Company has extended its control into the mining regions of the Rocky Mountains, with a scheme in view for building to the Pacific coast. If this combination can be brought into efficient existence, it will constitute a transcontinental trunk line under one control from ocean to ocean, which will induce similarly closer connections along rival routes.

But with the development of the trans-Mississippi railroad system, the shorter distances to the seaports on the Gulf of Mexico will create competition that will permanently divert from Chicago and the North Atlantic ports much of the traffic of that region, which is rapidly increasing in population and products. Chicago is likewise the centre whence the transcontinental lines radiate to ports on the Pacific as far apart as San Francisco and Puget Sound, but here also the ports on the Gulf of Mexico must exert a powerful competitive influence on all traffic with Europe.

Beyond the Rocky Mountains there is a reversal of commercial currents from Atlantic to Pacific ports, and this reversal will become far stronger as the Pacific coast ports develop a commerce with the hundreds of millions of population of Asia,—a commerce that will some day build up industries on that coast equaling in magnitude anything that we now see in the older States of the Union. These changes in the currents of interstate commerce are giving rise to a new series of

traffic problems for solution by railroad managers and new issues for discussion by politicians.

This rapid glance at the important features of the railroad system of the United States will enable us to realize how powerfully they have affected the consolidation of railroad corporations, originally dissociated financially, into component links of rival systems occupying natural lines of communication. Where this has been done to facilitate the service on direct routes, it has been of great national benefit; but as it also increased the efficiency in competition of these rival routes, there has been the further result of a combination between financial interests controlling these consolidated corporations that has had a different effect on the public welfare.

As general legislation to prevent such combinations has proved to be invalid by reason of constitutional limitations, these limitations have been removed in many States by constitutional amendments prohibiting the purchase of a controlling interest by one railroad corporation in the stock of a competitor. When the New York Central Railroad Company was aiding indirectly the construction of a road into Pittsburg, the heart of the largest iron traffic in the world and an invaluable monopoly of the Pennsylvania Railroad Company, the State of Pennsylvania had such a constitutional provision prohibiting the acquisition of a competing line; but the Pennsylvania Railroad Com-

pany brought such pressure to bear upon the New York Central Railroad management that the road is incomplete to this day. The most recent of the trans-continental roads is controlled by a corporation of an anomalous character, the Great Northern Railway Company, which is in fact merely a company formed for the control of railroads built under other charters and which still retain their legal personality. The Great Northern Company derives its powers from a Minnesota charter under a different name, granted for the construction of an insignificant road. It now controls the operations of 8000 miles of road entirely through the ownership of stock or by the lease of subsidiary corporations. In addition, it controls, jointly with the Northern Pacific Company, the Chicago, Burlington and Quincy system of over 8000 miles.

The remarkable extension of the railroad system of the United States has furnished a basis for an equally stupendous financial system. They have been complementary to each other in directing to this country a vast amount of the surplus capital of Europe; and, in pointing out the abuses that have accompanied the expansion of their operations, we should not forget that they have jointly served a most beneficent purpose in the development of our resources and in furthering the prosperity of our people. This immense aggregation of capital, now amounting to \$12,000,000,000, is for the most part invested in immovable property,

instrumental in our productive capacity and subject to our laws, irrespective of the changing conditions of commerce or of the international money markets. This property is mainly represented by 200,000 miles of railroad lines, 43,000 locomotives, and 1,800,000 cars, and gives direct employment to over 1,300,000 men. The means and methods by which this enormous and widespread instrumentality is made efficient in the public service will next engage our attention.

CHAPTER V

RAILROAD OPERATION

A RAILWAY company, simply as a corporation, bears no different relation toward the State than does any other corporation, nor toward the people, as a means for concentrating capital for a definite purpose. It is in the peculiar nature of that purpose that its relations differ in both respects. That difference begins with the acquisition of its right of way through the exercise of the right of eminent domain, whereby it becomes measurably an agency of the State and, in that relation, is especially subservient to its behests. In all other respects a railway company controls its property rights, its movable property, and its cash assets like any other private company, until it begins to apply them to its own profit. Then it can only utilize its property rights for its own benefit by the exercise of another grant of sovereign power, the right to collect tolls. Here again it fills a vicarious office that brings it under State regulation in the use that it makes of the grant.

These two franchises, of expropriation and of toll-gathering, though associated in their origin, are not in their nature; for one represents the might of the sov-

ereign, and the other the tribute paid him for protection on the highway. They were exercised separately for ages and were not united in one agency until the incorporation of turnpike companies, when tolls were no longer tribute, but became compensation for maintaining the highway. Along this highway the people journeyed, each after his own fashion and paying toll accordingly at every turnpike bar. So also did the carrier as he plied for hire. He needed no franchise in his avocation, paid toll like other wayfarers, and charged what he pleased for his services, subject to competition.

It was a simple improvement that revolutionized the whole system of internal communication in England. To ease the burden on draught animals in the collieries, broad beams of timber were laid down, end to end, for the coal wagons to run on. Next, to reduce the wear of these beams, cast-iron plates were fastened on their surfaces, with raised edges to keep the wagon wheels upon them. Then, by a stroke of genius, an humble colliery man made our modern railways possible. It came to him like an inspiration that the friction of the wheels against the raised ledges of the iron track plates would be greatly relieved if these ledges were taken off the plates and put around the wheels, as flanges. This great invention, the basis of easy traction and of high speed, was a gratuitous grant to railroad corporations, not from the sovereign, but from an almost unknown coal-miner in the north of England. See what came of

this invention ! The owners of the coal-mines extended their tracks, now transformed into railways, from their mines to the waterways. In so doing they necessarily united in a corporation to secure the right of way for a track for their common use. Only wagons with flanged wheels could be hauled on such a track, and a class of carriers sprang up provided with such wagons, the first railway carriers for hire. Their business was separate from the maintenance of the railway and the charge for tolls was also separate, *when the locomotive appeared*.

Draught animals were not immediately supplanted by locomotives, which remained for some time in experimental use on the same tracks. Therefore the distinction continued in railway charters between compensation for the use of the track, and traffic charges as paid to the common carrier. The experiments with locomotives were conducted in the interest of the railway corporation, and, when steam was altogether substituted for horse power, a tariff of charges was framed as compensation for the use of locomotives in hauling the wagons of common carriers. There were now three distinct tariffs in connection with railway transportation: one for the use of the track, one for the use of the locomotive, and one for the use of the wagons. This latter charge was soon confined to freight traffic, as it proved impracticable to farm out the transportation of travellers. As increasing traffic on the railways

required a more concentrated organization for its efficient conduct, the service of every kind was taken in charge by the corporation owning the track and locomotives, though private wagons continued in use for certain classes of traffic. These were the successive steps by which the public service rendered separately by the turnpike company and by the common carrier became united under the railway corporation, and in this way the separate compensation for each kind of service became merged into one tariff of rates.

Though the functions of the turnpike company and the common carrier are united in the railway corporation, the respective services are still rendered separately by reason of their distinctive natures. This distinction is clearly recognized in railway operation, in which the maintenance of the roadway is organized as a special department. The character of the vehicles employed in railway service has led to their maintenance being cared for also by the corporation in the department of locomotive and car repairs, which performs the former offices of the carriage maker, the cartwright, and the farrier. Neither of these departments in railway operation represents the former common carrier, so far as his service included the receipt of passengers and goods, their transportation and delivery at destination, and the collection of compensation for the same. That service is performed by the transportation department, which is usually associated with the maintenance of

the roadway and of the equipment under one head, as the operating department. The transportation department is the only department which comes directly in touch with the persons for whom the railway performs the service of a common carrier.

I have already referred to the substantial construction of the early railways in England, and the reasons for it. The well-drained and heavily ballasted road-bed, carefully located as to grades and curves, carried a track on longitudinal sleepers or stringers, which in turn bore a broad and heavy rail bound closely to the stringer by frequent fastenings. In the United States, the means for carrying on the work were insufficient and had to be directed to building some sort of a railroad for as many miles as possible, without paying much attention to securing easy curves and light grades. A stringer track was at first also used, but the rail was a mere strip of flat iron, with holes punched in its surface through which it was spiked to the stringer. Such a track has been described as a hoop tacked to a lath. The road-bed, as a general thing, was poorly drained and without ballast. All together, the roads first constructed in this country were crude affairs as compared with the English railways of the same date.

The American engineer was not at that time a highly educated man technically, but he was full of resources, and he rose to the situation. The problem presented to him was to devise the running gear for a vehicle that

would stay on almost any kind of a track. This the rolling stock of the English railways could not do. Their freight cars were adapted coal wagons, with no other cover than tarpaulins; their passenger cars were stage-coach bodies with side entrances. Both wagon and coach bodies were set on four wheels, as if still on a turnpike. Greater capacity was obtained in passenger carriages by placing two or three coach bodies back to back on the same frame. The length of both freight and passenger vehicles was limited by the length of the stiff wheel frame. For if that exceeded a certain length, it could not be supported on four wheels; and when six wheels were placed in the frame, they would not follow around a sharp curve nor stay on a bad piece of track.

This was of little consequence in England, where the track was smooth and with easy curves; but on the American roads it was a matter of great moment. So the American engineer copied his own road wagon instead of the English stage-coach, and rested his car body on bolsters held to the running gear by a king-pin. The axles were fixed in pairs, close together, in a short frame. These frames or trucks could swivel each on its own king-pin and thus accommodate themselves to inequalities of surface and to sharp curves. Each truck was independent of the other except by connection with the car body, which could be lengthened to any reasonable extent consistent with its own structural strength. The long passenger car bodies could not have side entrances,

for that would have weakened their frames; so the entrance was made from end platforms with low steps. With these steps, ground platforms were used at the stations, thus doing away with the expensive high platforms on a level with the carriage floors which are common in England, but which the continental railway managers rarely provide, to the great inconvenience of passengers, who have to scramble up into the carriages as best they can.

This simple device of a swivelling truck enabled American railroads to be built cheaply. It also lent itself readily to the democratic customs of our people, for the end entrances made it easy to pass through the train and encouraged sociability. On the other hand, the English carriages with side entrances accorded with the class exclusiveness which is an essential feature of the English social system.

The general application of the swivelling truck to our equipment has also been at the bottom of the economical operation which distinguishes our freight service as well as our commodious passenger service. While we are bringing our tracks up to English standards of smoothness and permanency, the English managers are slowly introducing our system of equipment to provide the comforts and convenience that can be obtained on no other plan. I have dwelt upon this fundamental difference, which began with our first experiments with railroads, because it accounts for most of the

divergence of our operating system, and for much of its success.

Another potent cause of divergence has been our almost boundless opportunity for expansion, as compared with the restricted area of Great Britain, and for the consolidation of many corporations into systems of thousands of miles of road. The motive that induces consolidation is either to facilitate communication, to suppress competition, or to furnish a basis for speculation. The first motive results in the formation of trunk lines; the second, in the common control of parallel lines; and the third in bringing diverse enterprises in a particular territory into some sort of financial combination. The unified control of competing lines results also in a further merger with them of branch lines and feeders into a territorial system in a region in which competition is thereby effectually suppressed.

Apart from the economic effect upon the public welfare of the suppression of competition which follows on the combination of rival routes under one control, there is the effect upon the efficiency of the service when the management over many thousands of miles of road is concentrated in one place. As each separate corporation is merged, the local management loses its freedom of action. All questions must be referred to headquarters for final determination. This causes delay in decision, and encourages local subordinates to evade responsibility by unnecessary reference of many things,

rather than to incur possible criticism by deciding them at once. It favors that form of government by correspondence known as bureaucracy, in place of the order by word of mouth from the official who is on the spot and takes in the situation from personal observation. The experience that comes from being in actual daily touch with the changing current of affairs can never be acquired by sitting in an office hundreds of miles away, even with the aid of the telegraph and the telephone.

I think that managers of the great consolidated systems do not fully appreciate the disadvantages which follow upon the concentration of decisions as to details in one centre of authority. Perhaps with many of them it is because they have come into power since the days when the superintendent of the road exercised full power of decision within a field of action which he could cover personally. Certainly the change has not benefited the public in one respect. It is a far cry to Rome, and the man in Indiana who has a grievance must wait a long time for its remedy while the papers are being referred all the way to New York and back again. In other ways the concentration of authority far away and the consequent withdrawal from personal association with the patrons of the road, of those who alone could adjust their grievances, has caused local irritation at many separate places, which has gradually coalesced into a general spirit of resentment at the disregard of reasonable demands, though such disregard

has been due rather to this cause than to indifference to the wishes of the people interested.

There are certain practical details of operation which so directly affect the manner in which the railroads serve the public that they cannot be overlooked in any consideration of their relations with the State. Among these the most important is that of direct responsibility for the safe and prompt transportation of persons and of property. This responsibility could be clearly fixed so long as it was confined to the service rendered by a single corporation; but as the line of one corporation became connected with that of another, the responsibilities connected with any joint service were not so easily to be placed.

There was much to be desired in continuous service between distinct corporations, with respect to promptness of movement and of security to persons and property, so long as both passengers and freight were subjected to transfer at every point where the corporate control changed. The public welfare demanded continuous car service, yet there were serious difficulties in the way of its accomplishment by interchange of cars belonging to the different corporations. These difficulties involved charges for the use and maintenance of a car belonging to one corporation while on the line of another and the responsibility for repairs or the total destruction of a car from causes perhaps inherent in the car itself or arising in connection with the train service

or from other extraneous conditions. Cars loaded to a foreign line were in that way withdrawn for a long period from the service of the corporation to which they belonged, and, in the meantime, they might be used in the local service of the corporation receiving them, or they were loaded to some point on the line of yet another corporation. A car loaded by one company to the line of a neighbor might cross the continent before its owner received it again.

These difficulties were solved first for light and valuable packages by the establishment of private express companies, which have gradually assumed an importance unknown in the railway service of other countries. This plan for continuous transportation of parcels was next adapted to the movement of merchandise over a joint route between important termini, as New York and Chicago. Here the corporations in interest became joint owners of cars employed especially in that service, under a separate management known as fast freight lines. The superior service furnished by them increased the business of the fast freight lines beyond the capacity of their special equipment and it became necessary to utilize the ordinary freight cars on an agreed compensation per mile run. Ultimately this arrangement was extended to the use of the cars of one corporation in the service of any other corporation, until now the general stock of nearly 2,000,000 freight cars in this country, in Canada, and in Mexico, is freely

interchanged, under rules for recording, accounting, and paying for the service performed at a uniform rate of compensation, for determining and adjusting claims for repairs and damages, and for the inspection of the condition of the cars at points of interchange. This great service, unappreciated because unrecognized by the public who profit by it, has been accomplished without the intervention of courts or legislatures.

The admirable arrangements for the continuous service of freight cars without transfer has not been so successfully applied to caring for their contents. Car robberies are so frequent and bold as to indicate insufficient watchfulness, while the delay attending the settlement of loss and damage claims is not creditable to the traffic department. Singular to say, this is the only service connected with the handling of freight which is not under the charge of the operating department. A higher degree of diligence is required of railroad companies than of other common carriers. They are virtually insurers against all risks to the property under their charge, to some extent even when gratuitous bailees as warehousemen. They are also held to a peculiar responsibility on through bills of lading in connection with carriers by water, covering the period of transfer between car and ship. These points, though referable to the restrictive action of legislatures and to judicial decisions as applied to railroad corporations, are rather of a commercial nature, as are also the points

involved in the character of a railroad bill of lading as a negotiable instrument.

The system of interchange of cars in freight service was more reluctantly entered upon by our railroad managements with respect to passenger cars. This reluctance was due to the higher value of passenger cars and to their greater susceptibility to deterioration and to injury from bad usage. The standards of construction and maintenance differed widely on connecting roads; hidden defects in running gear were difficult of detection and possibly became dangerous on long runs at high speed. Connecting schedules were not well observed, which added another objection to the interchange of passenger cars in continuous train service. Consequently passengers were turned out of trains at all hours and in all conditions of weather at the very junction points through which ordinary freight passed without transfer.

Such discomforts were spared to passengers on the main routes of travel as these came under a consolidated management, but there was no improvement in this respect upon railroads generally until the introduction of sleeping cars after the Civil War. Nor would the comforts and conveniences which travellers now enjoy, by day and night, wherever they may go, have been vouchsafed to them but for the consolidation of the sleeping-car service throughout the land under a single management. For this great boon the people of the

United States are indebted to the master-mind of George M. Pullman. He not only secured to our people continuous passenger service in comfort; he raised the standard of construction in his sleeping cars so that the Pullman car is the safest place in the train. His cars brought automatic safety couplers into general use, and his patent safety vestibule has made it safe for woman or child to pass from car to car, unattended, at any speed of the train; at the same time these improvements have greatly minimized the perils of collision. Dining cars and observation cars have followed upon the introduction of through sleeping car service, not only here, but also on all the long runs in European countries. These high standards of safety and of comfort in continuous train service have been secured, like that of continuous freight car service, without legislative interference. This would seem the proper place to refer to the system of checking baggage in this country which wins the admiration of our friends from abroad, an admiration that we can readily understand when we undertake to register luggage in their countries.

The Pullman car service is in one aspect a private car line, since the cars are not the property of any railroad corporation, but as they are hired by the railroad companies, the service which the sleeping cars perform is looked upon by courts and legislatures as a function proper to them and to be regulated accordingly. As the service is usually rendered in connection with inter-

state travel, it is a matter which the State authorities find difficult to reach, even for purposes of taxation, and which has not yet been legislated upon by Congress. The legislation in many Southern States requiring the separation of negro passengers from the whites could not be complied with in the ordinary sleeping cars. Here again the interstate character of this service, reënforced by the protection afforded negro citizens by the Fourteenth Constitutional Amendment, has relieved the railroad companies from much embarrassment.

Another kind of car service has been developed in connection with the national routes of communication that has become of marked benefit to the public; that is, the through service for special classes of commodities, such as fresh fruit and vegetables, which, because of their perishable character, require particular care *en route*. The railroad companies that first attempted the transportation of bananas and oranges sought to deliver them in good order by providing crude appliances for ventilation in their cars. These were of no other benefit than to introduce fresh air, usually charged with dust. As the temperature changed on the north-bound trip, it was the duty of the trainmen to close the ventilators, a duty performed in so perfunctory a way as to be useless, and the business was so unprofitable to shippers that it would have been abandoned but for the appearance of refrigerator cars on

the coasts of Florida and California, loaded with beer and with fresh meat for the winter resort hotels. These cars were loaded back with fresh fruit and early vegetables, and the experiments succeeded so well that refrigerator cars became the recognized equipment for this kind of traffic. As a consequence the traffic flourished, greatly to the profit of the owners of the refrigerator cars, who had in the meantime largely augmented their equipment in the fresh meat business in the Northern States. To-day these cars are in use all the year round, and thriving agricultural industries have grown up which are dependent upon this mode of transportation. The only attention required is for re-icing the cars at certain intermediate stations, where ice-houses are conveniently located, in charge of employees of the car companies. The demand for these cars fluctuates with the season and, being for but a few weeks at a time in different regions, the railroad companies in each region could not afford to supply sufficient equipment for a glut of business, to be idle for the rest of the year. The railroad company pays for the use of the cars and the shipper pays the icing charge. The resulting charge to the shipper has recently been made a subject of serious complaint. The same specialization in a particular service by private car lines has been extended to other classes of traffic, as tank cars, live stock cars, etc.; so that in this respect our railroad methods have somewhat returned to the origi-

nal custom of separating the use of the car from the use of the track. In most of these cases, this service is performed by the owners of the private car lines for the benefit of their own business. It is only as in the use of refrigerator cars that they render a public service in freight traffic, as the Pullman Car Company does in providing sleeping car accommodations.

American methods of railroad management compare favorably with those in Europe, with one exception, in which it is confessedly unsatisfactory. The publicity given to train accidents by the newspapers, and more particularly by the reports of the Interstate Commerce Commission, has made this manifest. The great number of cases of personal injuries and deaths there recorded can only be accounted for by acts of negligence on the part of employees, or by the inadequacy of the regulations and appliances affecting railroad operations. A fair comparison with similar statistics of British railways points to some of the causes of the greater number of such casualties here.

In 1903, 6785 persons were injured and 1195 killed on British railways, on one-tenth of our line mileage but with a much denser traffic. In the same year, 76,000 persons were injured and nearly 10,000 killed upon railroad property in this country. This summary of killed and wounded exceeds those reported in connection with great pitched battles; but the reports of persons injured include 28,000 cases incurred about

shops, etc., not connected with train service, and a more adequate notion of the matter can be formed by looking first to the number reported as killed by trains, 9605 persons in one year.

One large class of these deaths, 5000 in number, was due to trespass on the tracks or trains, over half, in fact. In European countries this class of casualties assumes much smaller proportions, for two reasons. The tracks and station grounds are made difficult of access by fences, walls, gates and guards; and trespassing thereon is an offence visited with arrest and punishment by the police authorities. In this country, the railroad property, if fenced at all, is merely delimited; and if the trespasser escapes injury, he goes scot free of the police, who have no duty in this respect. Yet it would be difficult to protect these trespassers against the consequences of their own rashness by legislation, unless the railroad companies were required to effectually enclose their property and thorough police supervision was extended along the entire line. The cost of such protective measures to the railroad companies and to the taxpayers generally would be too burdensome for it to be undertaken, except gradually, with increasing density of population.

Of the remaining 4605 deaths, 842 befell persons not passengers or employees, who were lawfully on the railroad tracks, and of these 624 were killed at crossings. This class of casualties is almost absent from the statis-

tics of European countries, where the highway crossings are either separated from the tracks or, if on a level, are carefully guarded. In this country there has been very general State legislation from an early period requiring warning signs at crossings and signals from approaching trains; but no special attention was given to doing away with the level crossings until recently, beginning with Massachusetts. The separation of crossings can be much more cheaply provided for in the original location of a railroad than afterward. The elimination of all crossings at grade on a road in operation is an exceedingly expensive undertaking, which is only warranted where the train service is so frequent that such crossings become dangerous, even though carefully guarded. It is therefore but fair that some part of the expense should be borne by the public.

The casualties in connection with train movements, apart from those mentioned above, numbered 3763 killed and 40,000 injured, against 34 killed and 915 injured on British roads. They are more directly to be associated with negligence of employees or administrative mismanagement. To call these occurrences accidents is to a great degree a misnomer, for the most of them occur from personal inattention or recklessness, from defects in track or equipment, or from non-observance of rules by employees, and are therefore not to be regarded as fortuitous or unavoidable. Of 355 passengers reported as killed in 1903, 128 were caused by

falling from trains or in endeavoring to get on or off trains in motion, and are therefore not fairly chargeable to railroad mismanagement; as should be the case with the 173 lives of passengers lost in derailments or collisions. Compare this loss of life among passengers with the fact that, in 1903, out of twice the number of passengers transported, but 2 were killed in a train accident either in Great Britain or Ireland.

Collisions are the least excusable of all the so-called railroad accidents. They are divided into butting collisions, rear collisions, and crossing collisions. Butting collisions occur from two trains running in opposite directions on the same section of track, and they could never happen if the Uniform Train Rules of the American Railway Association were strictly observed, for under these rules, as between any two opposing trains, the superior right of one of them to the use of the track between two stations is clearly defined, and, when this right is temporarily withdrawn, the necessary instructions should not be acted upon until the conductors of both trains have been fully informed and have signified that fact to the controlling official. Therefore, in a butting collision, either proper instructions were not given or they were disregarded. In Europe collisions of this character cannot occur because of the general insistence upon double tracks; while in this country, with a road mileage of 205,000 miles in 1903, but 14,700 miles were provided with a second track, and in the

past ten years there have been but 4600 miles of second track built.

Rear collisions occur from trains running too closely together in the same direction and can only be prevented by more efficient means for preserving a proper interval between them than are in general use in this country. In Europe the system of protection by block signals is more generally employed. Under this system, the road is divided into block sections, and no train is permitted to enter a section until the preceding train has passed out of it, which furnishes an efficient safeguard against rear collisions.

Negligence of employees is the fruitful cause of crossing collisions. Such points of danger are usually guarded by warning signals, even where this is not peremptorily required by law, but there seems absolutely to be no way to prevent careless engineers from over-running a crossing, except by the intervention of a device which derails the train that passes a crossing signal set at danger. A more efficient but much more expensive plan is to separate the grades of the two roads. This is not likely to be obtained by agreement between the two companies interested, except through pressure applied by appropriate legislation. As a general probability it may be assumed that butting and crossing collisions are due to the negligence of employees, and rear collisions to administrative mismanagement. Casualties from these causes fall far more heavily upon employees

than upon passengers. While 123 passengers lost their lives in collisions in 1903, 574 employees were killed in the same way.

Casualties in coupling cars fall heavily upon employees, not so much in loss of life, as in lesser injuries; the deaths from this cause in 1903 were 281 and the injuries 3551. The number of casualties incurred in car coupling made a great impression upon the popular mind, insomuch that some twelve years ago it became a feature in national politics, and an act was passed by Congress in 1893, known as the Safety Appliance Act, which required, under penalties for non-compliance, that air-brakes and automatic couplers, which were then coming into general use, should after a fixed date be applied to all cars and vehicles engaged in interstate commerce. This was the first and remains the most important congressional legislation concerning the practical operation of railroads, though there have been some minor enactments as to caring for live stock in transit, etc. This Safety Appliance law did nothing more than to legalize the safety appliances in use by making their adoption obligatory. It would have been impracticable to have enforced such legislation at an earlier date because such appliances of a satisfactory character had not yet been devised. In 1890 for every thousand cars in service there were seven casualties in coupling, whereas in 1903 this average had been reduced to two.

Either the employees on British railways are more

careful or are better protected from casualties in train service than ours are. On the British railways, in 1901, out of 575,000 employees, 1 in 1127 was killed and 1 in 135 injured. In the United States in 1903, out of 1,312,000 employees, 1 in 384 was killed, and 1 in 40 injured. Railroad employees in this country therefore run about four times greater risk of being killed, and about three times greater of being injured, than the employees on British railways. The total number of casualties reported on the railways in India in 1903 was 1143 killed and 1142 injured. This was on a road mileage of 26,851 miles with a train mileage of 95,960,000 miles. The most of these occurred to persons who were neither passengers nor employees. The casualties in train service amounted to 44 passengers killed and 116 injured out of 210,231,000 transported, while 12 employees were killed and 74 were injured. Out of a total of 402,249 employees, the casualties from all causes averaged 1 killed for each 1400 and 1 injured for each 850. These comparisons appear to sustain the opinion that the provisions for safety upon our railroad system are not up to the standards abroad, and that they have not kept pace with the increasing speed of trains and density of traffic.

In criticising the train service of our railroad companies, we should consider that mankind is prone to apply remedies rather than preventives. The abuse has first to provoke complaint, and the public demand

for speedy train service is often acceded to without the accompaniments necessary for safety at high speed. As this necessity arises, inventive genius devises the proper appliances, but their adoption makes new demands upon the treasury. Railroad directors are willing to spend money for heavier locomotives and for more capacious cars, for these lead directly to greater economy and profit; but they shrink from incurring the great expenditures required for laying a second track, for equipping their lines with block signals and interlocked switches, and their trains with air brakes, automatic couplers, and vestibules. But if a management wants to be up to date in the speed of its trains, it should be up to date first with appliances for their safety; and, until this has been done, it should not be permitted to compete in this respect with roads that are already efficiently equipped. A novel opportunity for legislation regulating train service will be presented with the coming electrification of steam railroads. This change of motive force will bring with it more frequent service of smaller trains at higher speeds. It will call for heavy expenditures for equipment, power houses, and trolley wires; and the change should not be permitted unless it be accompanied by suitable provisions for safety under the new conditions.

The classification of railroads with reference to the character of service is clearly marked by certain conditions. First, there are routes radiating from populous

centres of primary importance, politically, commercially, or industrially; second, routes of communication between similar centres of secondary importance; third, branch roads without through connections; fourth, roads to serve local industries, as coal roads, quarry roads, and log roads. It is plain that roads of such different characteristics should not be held to uniform conditions as to modes of construction or operation. The governments of continental Europe recognized this distinction in the beginning of railroad enterprises, and the requirements as to location, construction, and operation were made in conformity with such a classification. In Great Britain all railroad construction and operation was held up to uniformly high and expensive standards until 1868, when the desire to provide better facilities for districts with but little traffic induced a relaxation of certain requirements as to second tracks, signalling apparatus, and highway crossings in favor of a subsidiary class of roads known as "light railways." Lines of this character are only permitted to be operated at low speeds and with light equipment. In the United States there has been no recognition of this principle of classification, either in special charters or in general laws, save in valuation for purposes of taxation. Roads of the lowest class, particularly log roads, are permitted to ramble over the surface of the country at the will of the owner, without other legal restriction than actions for trespass, and to be

operated in a reckless manner, subject only to suits for personal injuries.

There has been a good deal of scattering regulation of matters of secondary importance in train service; as, for instance, relating to the comfort or convenience of passengers, as to the position that certain cars should occupy in a passenger train, as to stealing rides or throwing missiles at a train, as to lighting switches or meddling with signals. The speed of trains is sometimes restricted over bridges or in passing through streets, and they are occasionally required to stop at every county seat or at other points on petition of a certain number of residents. Wrecking tools have been required to be conspicuously displayed in passenger cars, a grim reminder of possible contingencies, but neither a preventive nor a remedy. A remedy for unsafe train service is more earnestly sought in the courts, where sympathetic juries award punitive damages proportioned to the forensic eloquence of the plaintiff's attorney on a contingent fee. Such verdicts make a railroad management wince, but they are not graduated in accordance with the relative negligence or diligence displayed by the defendant corporation. When casualties occur through the negligence of an employee, the railroad company may be heavily mulcted, but he escapes unscathed.

The regulations established by common carriers for the safety and convenience of their passengers are given

something of the force of police regulations by our courts and in some instances by legislatures. There are stronger reasons for enforcing them upon the employees of a railroad company than upon its patrons. In Great Britain, railway train rules, when approved as by-laws by a board of directors, are enforced by the Board of Trade through the police force of the country and not by railroad courts martial. If a rule be disregarded, even without resulting damages, the offender is subject to prosecution and to heavy penalties in case of conviction.

At one time, in this country, the conflicting regulations of different roads with reference to their train service were causes of accidents. They had different standards of time, of signals, and of train rules, which led to confusion when their trains came to junction points. These difficulties have been remedied by the general adoption of the standards fixed by the American Railway Association, and now a railroad employee in Maine may go to California and find the same rules in use there as in New England. Legislatures might secure greater safety in railroad service by attaching penalties to any failure to conform to train rules by employees. This could readily be done if Congress were to legalize the standard code of train rules adopted by the American Railway Association, as it did in the legalization of its standards of appliances in the Safety Appliance Act.

In no one respect is the character of the train service in this country more open to criticism than as to its discipline. Discipline is a habit of mind, the result of careful training, close inspection, and an unfailing imposition of penalties, however slight, for infraction of rules. It is to be distinguished from devotion to duty, which is a sentiment, a matter of temperament. A breach of discipline should be penalized, not its consequences alone. The trouble with us is that this principle is not always kept in view by railroad managers. They are inclined to overlook derelictions which do not involve injuries to persons or property. Something of this laxity may be attributed to the resistance of organized labor to the enforcement of penalties.

The welfare of railroad employees has been sedulously fostered in State legislation by extending the liability of railroad companies in cases of personal injury to include those caused by the negligence of a fellow-servant, in prohibiting the running of freight trains on Sunday, in fixing certain intervals of rest between hours of service, and in requiring that the number of brakemen on a train shall be proportionately increased with the number of cars in a train. In many States, railroad employees are exempt from militia, jury, or road duty on the ground that they are engaged in a public service. Train and yard men are protected by the terms of the Safety Appliance Act of Congress.

Congress has also legalized the formation of national

corporations of train employees under an act of 1886, with power to establish branches in the territories. This act was amended in 1898 so as to require that persons should cease to be members of such organizations on participating in any strike or boycott, or in preventing other persons from laboring by intimidation or violence. One of the federal courts defeated a strike upon a road in its receiver's hands by an injunction. This led to concerted pressure upon Congress by the labor unions, which resulted in the passage of an act in 1898 requiring that employees under railroad receivers in federal courts should have the right to appeal to the courts in matters affecting wages or conditions of service, and that receivers should not discriminate against members of labor unions. There can be no reduction of wages without authority of the court and only after twenty days' notice. This act also prohibited blacklisting by railroad companies, or the requirement that an employee should contribute to a pension fund or should be required to sign a contract limiting in any way the legal liability of the employer as to claims for personal injuries. At the same time Congress took a step toward intervention in railroad strikes by giving power jointly to the Commissioner of Labor and to the Interstate Commerce Commission to act as a conciliation board in controversies between railroad managers and employees; but its services have been only once invoked. As a rule, neither party to such controver-

sies favors such intervention, except as a means of retreat in case of discomfiture.

The logical foundation for this special intervention in behalf of men in railroad employment is to be found in the fact that they are engaged in a public service; yet any legislation intended to make such employees personally responsible for disregard of train rules while in that service would be earnestly opposed by their champions. Deficiency in train service traceable to the physical or mental condition of employees has induced a systematic examination of them in these respects, at the time of employment and thereafter at intervals. There is also a tendency to fix age limits for terms of service, to which the labor unions object strenuously. There are a few perfunctory provisions in State legislation as to examination of employees, usually with the intention of strengthening the labor unions by requiring a State license as a prerequisite to employment in railroad service. With the extension of the power of Congress over interstate traffic, it is to be hoped that thorough examinations of railroad employees will be made obligatory, as they are now in military service.

The combination of railroad corporations into large systems has excited alarm at their potential influence over law-making, yet the combination of railroad employees into brotherhoods is virtually coextensive with our national boundaries. Their influence is recognized

in Congress as in State legislatures. Their recommendations are rather looked upon as popular mandates.

It is in connection with its operations that a railroad corporation becomes subjected to the restrictive action of municipal ordinances, as with respect to the occupancy of streets and the speed of trains. The validity of such restrictions lies ostensibly in the police power of the municipality, as exhibited in an ordinance conditionally permitting the laying of a track in a street. Such a permission may be viewed merely as a license, if the legislature alone has the power to grant such permission as a franchise. But if the privilege, as granted, were only a license, then the track might be removed at the will of the railroad company, and perhaps to the public detriment. The removal of a track so conditioned has been enjoined for this reason, a decision which seems to have no other legal foundation than that the license is of the nature of a franchise and carries with its acceptance a public duty.

A grant to use streets for tracks may be a license, granted only to a corporation charged with a public duty under a legislative franchise which, if accepted, cannot be evaded by ceasing to operate the road in the street. If it is not essential to that duty it may be only a license; but if essential, then it becomes *ipso facto* a privilege granted because of the possession of the franchise and becomes so assimilated to it as to be virtually

indistinguishable from it. This view may be modified when an ordinance contains provisions amounting to an adequate compensation for the privilege and consequently partakes of the nature of a contract. Such an ordinance, when accepted, therefore, is not open to repeal or amendment by reason of any general reservation of power to that effect. The view that such an ordinance is also of the character of a franchise is, however, further strengthened when we find the privilege of occupancy derived from it being mortgaged as part of the right of way of the company, acquired as an easement.

The control of the speed of trains within municipal limits by police power has sometimes caused friction between the city authorities and the railroad company, especially where that power has been exercised in putting a pressure upon the company to stop all of its trains at the city station, or perhaps some particular train that is run as an express. When this power is utilized for such a purpose by village authorities it becomes a persecution, and for this, and for other reasons, it seems advisable that the exercise of the police power for the restriction of railroad operations should be regulated by legislation alone rather than by municipal ordinances.

The operating department, which does all of the work connected with the public service of a railroad, also collects the compensation for performing that service;

but it has no other association with the franchise for collecting tolls. It does not fix the rate. That all-important duty is assigned to another department in connection with the solicitation of business. The field of action of this, the traffic department, is sharply separated from that of the operating department, insomuch that no practical relation is maintained or sought between the cost of the service and the compensation for its performance. On general principles, there seems to be no logical relation between fixing rates upon certain business and soliciting that business; but that is a matter which has led to such important consequences that I prefer to treat the traffic department at greater length in the next chapter.

CHAPTER VI

RAILROAD TRAFFIC

THE productive capacity of the plant of an industrial corporation is gauged by its output of marketable commodities; the productive capacity of the plant of a railroad corporation is gauged by the use that the public makes of it, measured by passenger-miles and by ton-miles; that is, by its traffic. The price of commodities is fixed by the economic law of supply and demand; the price of transporting them is fixed by tariffs of rates. This one question of railroad rates furnishes subject-matter for most of the discussion concerning the specific regulation of railroad operations by legislation. There is no end of theories on the subject of rates; but to discuss the matter intelligently it is necessary to discuss it practically, to go back to the beginning and follow up the manner in which railroad tariffs have been developed.

Like most matters connected with railroads, they have grown out of turnpike usages. I have already described how three elements of compensation for railroad service were blended in the rate paid for it; that is, respectively for the use of the track, the vehicle, and the

motive power. The charges for furnishing the track and for hauling the car might well be made uniform on the same road to the common carrier, but the carrier himself came directly in contact with the public in the receipt, transmission, and delivery of persons and property, and in fixing the charges for his services he had to add, to the possibly uniform charge paid by him for the use of the track and the motive power, a variable charge for the multifarious character of the specific service performed for each of his patrons.

The passenger service was more easily classified as to its character than was the transportation of commodities, and was therefore more readily classified as to the charge for its performance; so many miles, so many pence, according to the more or less comfortable service and the rate of speed. Third-class passengers were originally carried at slow speeds, in open wagons without seats. In 1844 Parliament required that they should be transported at a speed of not less than 12 miles an hour, including stops, in roofed carriages provided with seats, and at a rate of not more than a penny a mile. But they were still treated with scant courtesy until the Midland Railway Company fought its way into the front rank. In 1872 that company abolished second-class rates, gave third-class passengers second-class comforts, and reduced first-class fares to $1\frac{1}{2}$ pence per mile; and its rivals had reluctantly to follow its example.

From 1870 to 1880 third-class travel had more than

doubled. In 1880, out of 541,000,000 passengers, five-sixths were third-class, providing more than twice the revenue of the other classes. In 1903, out of 1,226,000,000 fares, exclusive of season tickets, 5 per cent were first-class, 6 per cent were second-class, and 89 per cent were third-class passengers.

In the United States there was but one class of fares, as but one class of accommodations was provided for all passengers, until the introduction of sleeping cars, and there is no distinction of charges for trains of different speed, except in the case of a few luxurious trains on long routes. Our democratic customs and our long thoroughfare cars are not so favorable to the application of class rates to passenger service as in foreign countries, with their clearly defined social distinctions and their trains composed of a number of small, isolated carriages. Still, our long distances and high mileage rates deter poor working people from travelling in search of work, and tend to their congestion in our large cities. The normal passage rate in England is about 2 cents per mile. The average rate in this country in 1901 was a fraction of a mill higher. The average rate on the roads of continental Europe is lower than in England. In Germany, in 1896, the average rate was 0.96 cent per mile; in Russia in 1894 it was 0.72 cent per mile. The lowest average rate in the world is in India, 0.5 cent per mile.

The standard of mileage rates prevails generally in

passenger service throughout our country, and is made the basis of the principal departures from it. For instance, the fare over rival routes between common points is equalized by the adoption of the mileage rate over the shorter line. Excursion rates and return or round-trip tickets are based on the same principle when the charge is made, say of one and one-third of the straight rate one way.

The earnings from passenger service constitute only 22 per cent of the gross railroad income in this country. To this smaller proportion, combined with the relative stability of passage rates, has been due the lack of political agitation concerning passage rates. The principal disturbing element of a popular character is that caused by scalpers. The scalper is a thorn in the side of the passenger agent. He is in evidence at every competitive centre, at every excursion point, prepared to buy or sell the return portion of round-trip tickets at prices below the straight rates. He is associated with his fellows in a combination covering all these points and exchanges tickets with them. He has risen superior to all the plans devised by associations of passenger agents for their mutual protection and, through his own associates and with the popular sympathy, has triumphed in the courts and lobbied down legislation intended to make his occupation illegal. The travelling public cannot understand that a ticket is not property, but merely the evidence of a contract, and that they

have only an equity in the unused portion of a ticket. They cheerfully become accomplices in any measure to defeat the contract rights of the other party which may cheapen their rides and do not unfavorably affect their personal convenience, even though provision be made for the proper redemption of the tickets by the railroad companies.

Competitive passenger traffic contributes such a small proportion of the revenue of our railroad companies that it rarely gives rise to serious rate wars and does not, therefore, serve to stimulate the cheapening of rates. Immigrant rates from New York at one time were badly cut, but that traffic is now pooled by the trunk lines. Freight may be diverted to circuitous routes by concessions in rates, when time is no object; but with passengers time is of importance and they seek the quickest route.

When we turn to the question of freight rates, we find a great difference of conditions, due to the widely differing character of the several commodities offered for transportation, as to weight, bulk, value, and inherent qualities. The impossibility of affixing a rate to each commodity necessitates grouping them in classes. The broadest classification is that adopted in the reports of the Interstate Commerce Commission. In their report for 1903, the entire railroad tonnage, amounting to 639,000,000 tons, is divided into percentages as follows:—

Products of the Mines	51%
Products of the Forests	12%
Products of Agriculture	10%
Products of Animals	3%
Manufactures	14%
Merchandise	5%
Miscellaneous	5%

This classification shows that the farmers produce only one-tenth of the total tonnage, and that one-half of it is of the very lowest class of freight, the products of the mines.

Classification is the principal feature of a freight tariff, to which the charge for distance is subordinated. The basis of classification is the relation of weight to bulk of each article. In early times, objects whose bulk was excessively greater than their weight were classed as measurement goods and rated by the cubic foot; but this distinction was replaced by their being classed by weight as first-class or double first-class. The relative value of articles of the same weight is another basis of classification, as between a package of silks and one of soap. Inherent qualities, as fragility, tending to injury with careless handling, or as in a liquid that might by leakage damage articles in contact with it, or explosives, — all these are causes for difference in classification. There are also certain commodities set apart each in a class by itself, as coal, lumber, or pig iron, because these articles may be transported on open cars and are usually loaded and unloaded by shippers. This principle of

a class for a single commodity was extended to other articles either for the encouragement of a specific industry, or more often to secure competitive business, so that each company or freight line may have a thousand or more special rates outside of its classified rates. Car-load rates constitute a class apart. Originally they referred to all articles of a similar character stowed in one car from one shipper to one consignee, but a car could be stowed with heavy articles beyond its strength, so a definite maximum weight had to be allotted for a car-load; and to prevent cars from being underloaded a definite minimum rate was also fixed. As car-load rates virtually constitute a separate classification, running nearly through all the list of commodities, so do rates at owner's risk, and on many articles differences in the manner of packing. Such an article as clothes-wringers appears no less than twelve times in the classification lists and of course at as many different rates.

These are but a few characteristic examples of the numerous conditions that have made the principle of the classification of articles the basis of a freight tariff. The process of classification has become specialized with great minuteness, not only as to the different articles themselves, but as to the different gradations in value of the same article of different qualities or as to the manner in which they are packed; so that the articles named alphabetically in a classified tariff run into many hundreds and are further differentiated when

applied to car-load lots or "at owner's risk." Different classifications are in use in different parts of the country. There is one used north of the Potomac and Ohio rivers and east of the Mississippi River, another south of the former rivers and east of the latter, and another west of the Mississippi. A change in the classification of a commodity is far more serious in its effects than a change in a rate upon it; because a change in classification affects every rate on that commodity generally, wherever the classification applies.

As already stated, the amount of the rate on an article is a secondary consideration to its classification. The rates are now almost generally per 100 pounds and were originally proportioned to distance, not closely but by grouping stations from the principal terminus according to the average distances in 10-mile sections, and then applying the same tariff to shipments between stations in the different groups for assimilated distances. But the application of a uniform increase of the rate for long distances would soon reach a point where the charge for the service would absorb the value of the article transported; therefore a new principle came into play, by which the rate was increased by a ratio diminishing with the increase in distance, so that a rate might differ 100 per cent for distances from 10 to 20 miles, and 10 per cent for distances varying by 100 miles. These facts all have a bearing on the theory of rate-making, but they were arrived at empirically in a period now so

remote from the experience of the modern rate-maker that he cannot tell how the basis which he applies in his rate-making came into existence; he can only say that he found it so. Freight rates are made up of details which powerfully affect results and which cannot be ignored in considering the practical effect of any method of making rates. These details are often so recondite that no traffic manager will enter upon matters affecting rates without his rate clerk at his elbow.

The freight rate itself is not so simple a matter as it seems. It is only simple when applied to a shipment between two points on the main line of a single corporation. When applied to shipments to any other destination, it becomes composite. If to a branch line, it is a combination of a certain proportion of the main line rate with the local rate over the branch; when the shipment is to another road, it becomes a joint rate, subjected to division between the companies and varying with the destination, whether it be a local or a competitive point. This matter also affects the rate as a whole. The rate, if competitive, may be divided on the basis of respective mileage, or it may be pro-rated on an agreed percentage basis, or one line may demand a fixed rate regardless of the total, called an arbitrary division. These arbitrary rates often apply to the use of great and costly bridges or terminals or belt lines. They have been utilized, too, in the indirect allowance of rebates

to industrial concerns with large products, whose works are connected with several trunk lines by switching tracks. These tracks are recognized as terminal lines and allowed large arbitraries out of the rates, which is of course a profit to the producer that may be utilized in his own rivalry with competitors.

Traffic managers of independent feeders may claim constructive mileage on traffic that they can divert to one or the other of connecting roads; that is, a haul of 50 miles may be pro-rated as 100 miles. On such business the trunk line has only the cost of haul, while the branch road has to be maintained from the earnings on that business alone. Or a subsidiary branch line may be allowed a disproportionate division of rates to cover the interest charges on its bonds that are assumed by the parent corporation. Sometimes such deficits are carried as assets in its balance sheet, in anticipation of their being paid off under improved conditions.

Certain tariffs of rates are known as basing rates, upon which other tariffs are collaterally based. For instance, the tariff of rates from New York to Chicago is collaterally associated with the tariffs from all North Atlantic ports to Chicago, St. Louis, etc., as well as to intermediate points of competition; so that a general change of rates westbound over this whole territory is effected by a change in the rates from New York to Chicago. This collateral association of the rates to and from North Atlantic ports is regulated by what are called

differentials; that is, certain differences are maintained between the rates to or from the several ports as compared with the New York rates. These differentials represent the results of hard-fought rate wars in which millions of income were sacrificed. They conform to port usages, harbor transfers, elevator charges, etc., and the commercial relations of the business centres interested have become adjusted to them. As a consequence, they have become an integral part of our commercial methods, and to interfere with them is to disturb the general currents of commerce throughout the country.

Our freight tariffs remind one of the present condition of the surface of the earth. Once it was no doubt in regular strata, laid down from time to time in conformity with the laws of stratification; but now the terrestrial crust has been broken up by intrusive forces which have made a jumble of that stratification. The immediate causes cannot be detected, but the character of the forces which have been exerted can be pointed out. So it is with our system of freight tariffs. We cannot now indicate the immediate causes of many of its inequalities and imperfections, but we know the intrusive force which brought them about. That force is competition; and the pervasive effect of competition in railroad rate-making has been of such moment, as affecting both railroad values and the public welfare, that it requires special treatment.

Competition began to influence rate-making as soon

as a railroad from one commercial centre was extended into a region before tributary to another. The relations previously existing between the city merchant and his country customers were not easily to be disturbed by solicitous drummers from the rival city. But the management of the new road was also eager for business and could aid the drummer by an argument which appealed to the country shopkeepers in the way of reduced rates, and then the war was on.

Under previous conditions, where there had been no railroad competition, the railroad management showed no special interest in the affairs of shippers; they might ship their goods at the stated rate or not at all. I have seen a freight tariff which had been so long posted up without change that it had become mellowed in color with years. It would be hard to find one of such a refined vintage now. The opening of a rate war electrified the management of the old road. Its representatives rushed into a conflict in which they were inexperienced, and bid against their rivals for business as in an auction mart. The absurdities committed in the open reduction of rates in the first stage of railroad competition are almost beyond belief. Rates were cut so low to competing points that merchants at intermediate stations could save money by shipping their goods through to such points and then paying local rates back to their station, but this scheme was stopped by raising the local rates proportionately. Campaigns

were fought between roads from different cities and between roads from the same city, to the exhaustion of rival corporations, and then there followed campaigns of trickery in which the slickest deviser of knavery won the day.

The soliciting agent was the prime factor in securing competitive traffic. He was in personal touch with the receivers of rebates, and his desire to stand well with them was more in his mind than thoughts of possible loss to his company in carrying freight below the theoretical cost of transportation. His book of passes was ever handy. Trip passes became annual passes, personal passes included family and friends, and passes were obtained by solicitors for their customers even over the lines of their competitors. The railroad managers purposely remained ignorant of the details by which business was secured. Secret rebates were merged into underweighing, transfer charges, travelling expenses, or by other ways of absorption, and the opportunities for speculation by the go-betweens in such transactions were unchecked by any methods of accounting.

The period of open discrimination between places had been succeeded by one of secret discrimination between individuals in the same place, which was next reduced to a system. Each of the rival railroad companies selected its associate in the principal lines of trade at points of competition, and to them was accorded the special privileges of rebates by discounts from their

freight bills paid indirectly. This practice was gradually extended to lines of manufacturing and productive industries. Such a favor was granted in the almost unlimited delay of loaded cars, which were used as warehouses by brokers and drummers, while they sought customers for the contents. These cars might be the property of rival companies, or urgently required for current business; but the desire of the local soliciting agent to curry favor with his customers prevailed over the rules of the company and the orders of the operating officials. This way of doing business attained such proportions that it told upon the net earnings of the greatest of the trunk lines. They could no longer control their own rates. They had so bountifully nourished their favorites that the recipients of their bounty turned upon them and cried for more, threatening to deprive them of the business which had grown by their own rebates. These demands waxed apace as they were acceded to, and reached a climax when the Standard Oil Company obtained a rebate from the great trunk lines on all the refined oil shipments of their competitors. The worst ingrates were the private car lines, which are now occupying a prominent place in the public view. Like all abuses, they are the illegitimate outcome of legitimate uses, as has been already explained in the discussion of train service in connection with handling perishable commodities requiring icing. The transportation of live stock, once an important item of trunk-line

traffic, has been for the most part merged into the shipment of dressed meats in refrigerator cars. This business has attained such magnitude that 54,000 cars are said to be in private car line service, and their owners levy a rate upon the rival railroad companies for the privilege of receiving their business.

Not only the business of rival cities, but also that of important transportation routes, was affected by such competition. The railroads from the West to Chicago had since 1850 diverted much traffic from the Mississippi River to the route by lake and canal to New York. The all-rail routes were too disjointed to be a factor in the situation until some twenty years later. By that time the principal lines from the North Atlantic ports had each secured an independent connection into Chicago, and their efforts to control westbound business brought on a rate war that resulted in a uniform rate on all classes of 25 cents per 100 pounds from New York to Chicago. Rates were nominally restored, but on a lower basis than before. The corruption of rebates working beneath the surface frequently broke out into a general epidemic of openly cut rates, in which at one time cattle were taken from Chicago to New York for a dollar a car-load. The earnings of all the corporations concerned were seriously reduced, and many were placed in the hands of receivers. The wits of practical managers were set to work to reduce expenses, and their efforts resulted in economies which diminished the cost

of freight service in this country below that in any other part of the world. By rate wars they learned to profit by a large volume of traffic at low rates, rather than by a small volume at high rates.

The fierce competition for westbound business had involved eastbound traffic as well. It was extended for the first time to the lower classes of freight, which had before been exclusively carried by lake and canal. The steamers on the Great Lakes became feeders to the lake termini of the all-rail routes. The grain rate by lake and canal had been reduced from 19.2 cents per bushel to 9.5 cents, and could not go lower because of the canal tolls; and the Erie Canal, long a source of revenue to the State of New York, became a burden. Rates were reduced to a point that enabled goods to be shipped from the West by rail to the East, and thence by steamer to the South Atlantic ports. This drew the rail lines from the West to the South into the *melée*. They got into warfare among themselves, with results similar to those effected by the trunk-line wars, — bankruptcy, receiverships, and consolidations. The low rates over the all-rail lines from the West to the South dried up the commerce of the Mississippi River boats, which were tied up to its banks and rotted there. This diversion of business assisted to separate the interests of the Middle Western States from the Southern States, politically as well as commercially. The business of stations adjacent to points of competition suffered severely,

but without remedy, for it did not seem to occur to the minds of the competing managements that the traffic diverted from the local stations by cut rates and rebates had been drawn into the whirlpool of traffic to be divided with their competitors. The effects of unrestricted competition led to such discrimination between persons and places that the commerce of the whole country became affected by it. The natural advantages of certain places for certain lines of business were neutralized by the artificial advantages of railroad rates, and the question whether any particular person could successfully carry on his business at a certain place might depend upon the will of a railroad traffic manager.

The cotton traffic from South Atlantic and Gulf ports furnished the most important tonnage to the roads terminating at them, and they long enjoyed it as a monopoly. When the transatlantic ships from the North Atlantic ports fell short of freight, the coastwise steamships from the Southern ports united with them in making through rates to Europe, and this competition drove sailing ships out of the direct foreign business. Then came the change of gauge on the Southern roads, and the all-rail lines took part in the cotton traffic to Northern ports and to the New England mills direct from the interior points of shipment. Cotton compresses were erected at these points, and the cotton traffic of the Southern ports was largely withdrawn from them. The ship brokers at the ports lost a valuable business,

and great compressing establishments were closed. The export cotton shipments through these ports has also been diminished by the increasing consumption of the numerous factories at interior points.

The Erie Canal ceased to be a competitor for traffic between Buffalo and New York City when canal-boats could not command a higher rate than 1.75 mills per ton-mile. The grain trade by lake has flourished since 1894 on an average rate of less than 2 cents per bushel, or less than 1.5 mills per ton-mile, for the railroad distance between Chicago and Buffalo. Artificially deepened channels have permitted the use of vessels of greater tonnage, and the economies in the lake trade have kept pace with those in railroad service. These facts demonstrate that, on a large traffic under the most favorable conditions, competitive tonnage can be moved by rail at a fair profit for 500 miles at 1.75 mills per ton-mile, but that at 1.5 mills it ceases to be profitable. The coal trade from Pittsburg to New Orleans by river flourishes on a rate of \$1.00 per ton or about .5 mill per ton-mile, which is therefore apparently below the minimum cost of railroad transportation for a very long haul of a very cheap commodity; yet in a rate war that broke out in the winter of 1903-1904, with reference to differentials on lake grain from Buffalo, the rate to the seaboard was reduced to a still lower figure per ton-mile.

In the sequence of causes and effects brought about by unrestricted competition, the matter of grain rates

for export has exerted a remarkable influence. In the beginning of trunk-line competition, the bulk of the business was westbound, and grain was sought as freight for empty cars returning east; but in the joy of combat considerations of profit were lost sight of in the desire to swell the volume of tonnage. This spirit of rivalry at first found its appropriate field in the export grain business through the port of New York, but as the lines from other North Atlantic ports became consolidated with their Western connections and better organized for efficient service, they too entered the field, until every port, from Portland, Me., to Norfolk, Va., was bidding for export grain business. Many of these lines needed eastbound freight for their empty cars, and could transfer a small amount of grain from car to ship at less cost than in New York. It was new business to them, and, taking it in gross, it was a serious matter to the New York lines. The transatlantic ships from that port were also deprived of a class of traffic which was valuable for filling up unused freight space, so they became partners with the railroads in making joint rates from Chicago to European ports. At the other North Atlantic ports which were without regular transatlantic lines the railroads at first guaranteed cargoes to tramp steamers, and even chartered them.

The export grain business became entirely dissociated from the ordinary business of the railroads. Rates between termini were disregarded and were fixed

between Western points of origin and European points of delivery. In this practice other classes of export freight were included. The rail lines into New York were losing an important branch of their traffic, a loss in which harbor industries, commission merchants, brokers, and bankers shared; and there was but one course to pursue. To save much, they must sacrifice something; so they agreed to recognize the intrusion of the roads to the other North Atlantic ports into the export business by according them a small difference in the rates from the West to the seaboard, which varied with the conditions that were assumed to prevail at each port as to harbor charges and ocean rates; while the total rate from the interior point of origin to the foreign point of delivery was to be equal through all the ports. These differential rates, as they were called, were at first fixed at so many cents per 100 pounds below the rates to New York; but as the total rate was gradually reduced, the fixed differentials were changed to percentages of the total rate. Before this matter could be adjusted between the North Atlantic lines, other rivals for the export grain traffic presented themselves in the roads which had been recently extended from New Orleans and Galveston into the trans-Mississippi region. These lines operated with great advantage as to shorter rail distances, but were at a disadvantage in longer ocean distances and correspondingly higher ocean rates; but grain was a welcome addition to the lightly laden cotton

ships that would otherwise have had to carry unprofitable ballast; so the export grain traffic *via* the Gulf ports became a menace to the Atlantic ports as a whole.

It is most seriously felt in corn shipments from the region tributary to Omaha and Kansas City. In 1900 15 per cent of the total exports of corn went through Gulf ports; now the proportion is said to amount to 40 per cent. This does not all represent actual loss of business to the North Atlantic ports, as much of it is the product of a virgin territory. The Western connections of the trunk lines are, however, making a great effort to secure it, and the competition has the familiar features of a fierce rate war. The rate from Omaha to New York has been reduced from 25½ cents per 100 pounds to 13 cents, and to Baltimore to 11½ cents, as against 11 cents to New Orleans.

The effect of a sudden reduction of 50 per cent in the cost of transporting any low-priced commodity of general consumption is, of course, to greatly disturb existing conditions in the commerce in that commodity. The effect in this instance is the more complicated because of the discriminations that accompany the incidence of the reduced rates. They do not apply to other kinds of grain, and, of course, the established differences in the price of corn and oats, as feed for animals, and of wheat as food for men, must be readjusted in all the markets affected by the reductions in the corn rates. As these rates apply only from Omaha and

Kansas City, other corn-shipping points and regions of production must be placed at a disadvantage. The rates from Omaha to St. Louis and Chicago have also been reduced, but unless the reduction is as great as to the seaports, these markets are unfavorably affected. The intermediate markets are in the same plight; some of them have had the benefit of a reduction, others have not. It was found impracticable to confine the cut rates to corn alone. Rival lines applied them to all kinds of grain from eastern and central Iowa, and as the farmers of that region find their grain worth some three cents a bushel more in consequence, he would be a poor politician who would advocate suppressing competition by the Gulf ports.

I mention this matter because it is one of current interest and because it illustrates how long-established commercial relations affecting a commodity of vital importance to large areas of production and to great centres of concentration and distribution may be suddenly thrown into confusion because of the novel conditions to which they are exposed by a war of railroad rates. And further, in this particular instance an issue of a national character is involved. It is not a contest between parallel lines for business between their common termini, but one between two groups of roads from a common territory to terminals far apart. It is at bottom a trial of strength between commercial interests centring respectively on the Atlantic seaboard and on

the Gulf coast for the trade of the last new prairie region that remains in the United States, a region rapidly increasing in population and prosperity. It involves not only the value of the traffic of that region to the railroads contending for it, but also the welfare of the commercial interests that are collaterally associated in the contest with each of them.

Nor is this all that is at stake in the growing rivalry of the roads to the Gulf ports. They have also an advantage in distance to the Rocky Mountain region and to California markets, which enables them, in connection with coastwise steamship lines, to dictate rates between the North Atlantic ports and those regions to the all-rail lines. The rates thus forced upon the all-rail lines discriminate against the jobbing merchants and manufacturers of the Middle West who seek to extend their trade toward the Pacific, and they complained of this discrimination against them as unjust. Those situated at the eastern termini of the transcontinental lines have been favored with certain reductions, in which the roads to the Puget Sound ports had also to take part; and then the people of the cities in the Rocky Mountain region complained in their turn of the resulting discrimination against them.

Still another issue is involved, which is the reverse of the export rate problem, and that is the discrimination made by all the railroads from seaports having European steamship connections in favor of goods imported

directly by interior merchants, as against shipments of the same commodities either by importers at the seaport cities or by domestic manufacturers. The latter complain that such discrimination is a virtual nullification of our protective tariff system. The parties interested in the export business at the Gulf ports encourage the discrimination in favor of imported goods, since the tonnage that they afford to the transatlantic shipping cheapens their own outgoing freights.

There is an odd complication introduced into this controversy by the recent acquisition of the Panama Railroad by our federal government. The management of that road has been for years party to a division of traffic to and from our Pacific ports, by which rates were maintained at agreed minimum figures; but now it will be difficult for the United States to be a party to pooling agreements prohibited by its own laws, nor can the government very well ignore the constitutional provision to the following effect, "No preference shall be given by any regulation of commerce or revenue to the ports of one State over another." This whole matter is the most important, perhaps, involved in the government regulation of interstate commerce. It will probably be made a sectional issue whenever the control of it is taken away from those who are pecuniarily interested in its adjustment, and placed in the hands of officials who must be guided by other considerations.

Reference might also be made to the results of com-

petition in the anthracite and bituminous coal regions and to the causes which led to the transfer of the oil traffic from railroads to pipe lines; but any person who wishes to comprehend the field of railroad traffic, the influences which affect railroad competition, and the consequences that often ensue upon apparently immaterial changes in rates, would do well to digest the information contained in reports of railroad officials, commercial associations, and legislative committees, beginning with the report on the adjustment of railroad rates, by Albert Fink, in 1882, and ending with a paper on trunk-line differential rates in the Statistical Report of the Department of Commerce, April, 1904. The bulky volumes of evidence accompanying the reports of the United States Industrial Commission constitute a treasury of information on these matters.

CHAPTER VII

RATE-MAKING

IN entering upon a discussion of any complex question, we get a clearer comprehension of it if we first disentangle the abstract and permanent principles involved in it from the many transient aspects which it assumes as a concrete whole; and an intelligent comprehension of rate-making is furthered by a consideration of the theory apart from the practice. This is all the more important because rate-making has become the storm-centre of the railroad problem, the point of convergence of all arguments about State control of railroad corporations, and the point of divergence of all opinions with reference to it. The expounders of these arguments and opinions enter the forum from opposite sides; the advocates of State intervention from a study of the subject in the abstract, the advocates of the let-alone policy from the field of experience. It is a lining up of theory against practice, and, to begin with the principles, we will first take up the hypotheses of the theoretical rate-makers.

It is assumed on both sides that a rate should be just and reasonable, and the first problem to be solved

is what constitutes a just and reasonable rate. We may consider that by just rates is meant that there shall be no unjust discrimination, but what is the idea conveyed in speaking of a reasonable rate *per se*? It is maintained that transportation charges shall only result in reasonable returns upon the investment, but what shall be the standard of reasonable returns? Shall it be that of a reasonable return on the original cost of the property with subsequent expenditures for betterments; or upon an inventory of the property in its present condition with its value estimated at the cost to replace it at current prices for materials and wages; or at the current market value of its stock and bonds?

In two leading cases the courts have considered capitalization as the basis of rate-making. In the Minnesota case, the Great Northern Company had applied to the court for relief from the tariff of rates fixed for its lines in that State by the State Commissioner. The Commissioner had framed a general freight tariff which would produce a reasonable return, in his opinion, on the price at which these lines had been sold under foreclosure in 1876, \$3,600,000. By 1890 the purchasing company had increased its stock to \$20,000,000 and bonded the property for \$84,000,000, and had leased it for fixed charges and a guaranteed dividend of 6 per cent to the Great Northern Company. This company claimed that it was only reason-

able that it should be allowed at least to earn its fixed charges on its leased lines. The lower court reversed the Commissioner. The State Supreme Court ordered a new trial, holding that capitalization had no bearing on reasonable rates; that the proper basis for reasonable rates was the present cost of reproduction. This was in 1896.

In 1898 the Houston and Texas Central Railroad Company appealed from certain rates made for it by the Texas Commission and alleged to be based on the cost of reproduction. In this case, the United States Supreme Court decided that this was an undervaluation; that in arriving at reasonable rates additional allowance should have been made for the general advance of values in the country, due to the construction of the road, and the consequent value of its long-established business and good will. In the case of *Smith vs. Ames*, the same court recognized as elements in arriving at the reasonable earnings of a railroad, its original cost of construction, the cost of permanent improvements, the present as compared with the original cost, the sum required for operating expenses, its earning capacity under any statutory rates, and the market value of its securities.

If the cost of the property and betterments is to be represented by the current capitalization, that does not recognize the actual investments which may have been lost or scaled down in reorganizations;

or the current capitalization may include watered stock not honestly entitled to recognition. If the property is to be valued at what it would cost to replace it at current prices for materials and wages, are we to consider that prices vary greatly at different periods and that on this basis frequent revaluations would be necessary? If we are to resort for values to the stock market, whose prices fluctuate daily, where could we find a less permanent basis? And again, on any accepted basis of valuation of railroad property, at what rate of interest should the reasonable dividend rate be fixed? At the lowest rate at which banking houses will make time loans on good collaterals? The attempt to fix a stable valuation of railroad property as a foundation and the dividend rate as the measure of reasonable returns from transportation charges is as fallacious in theory as it has been proved to be futile in practice.

For the net returns from transportation charges are not solely applied to the payment of dividends and interest. A portion must be set apart for extraordinary expenses that are required at intervals for the restoration or replacement of deteriorated plant. Another portion must be put aside to pay for betterments of an expensive character, as improved appliances on a large scale for safety, convenience, and economy in transportation; unless the English plan is to be pursued and such improvements are to be provided

for by additional capital with a permanent increase of the dividend fund. As an illustration of the fallacious character of the argument that either the capitalization per mile or the rate of dividends is a fair standard of reasonable rates, it need only be shown that the corporations with the heaviest capitalization and the highest dividends have the lowest transportation rates. This is no paradox; it is the logical result of a small rate of profit from an exceedingly large volume of traffic, and if the volume of traffic at such rates should produce net earnings for good dividends, the effect is to attract further investments in the extension or improvement of the public service that the railroad corporation performs.

What is the standard of reasonableness to be applied to a general classified tariff? Let us take as an example the system of trunk-line rates which is in force in the territory north of the Ohio and Potomac rivers. In this region the rates east and west bound are based upon the rates between Chicago and New York. Every station in this territory, as far south as Louisville, Kentucky, and northward to Toronto, has its rates fixed at a certain percentage of the Chicago-New York tariffs, based approximately on distance as affected by water competition. This adjustment is the outcome of long experience in rate wars and compromises. The tariffs are in accord with the "long and short haul clause" of the Interstate Commerce Act, and commerce through-

out the whole of the United States east of the Mississippi River to the Atlantic Ocean and the Gulf of Mexico has become adjusted to this system of rates because of its stability and clearness of comprehension. It is no proof that a general tariff adjusted in this manner over a large territory is unreasonable in itself because it has resulted in profitable returns, for the average rate per ton-mile on the tariff to which it is applied is probably much lower than obtains on the general merchandise traffic of any country in Europe.

The amount of capital invested and the rate of return upon the investment have but a remote influence upon the rates of transportation. As a fact, the public is not directly interested in the returns from railroad charges as a whole, but in the charge for each specific service. So long as any specific rate is reasonable in itself, the railroad company has discharged its duty to the person for whom that particular service is performed, and it is not within the province of that person to concern himself with the ultimate disposition made of the compensation for performing it. If each specific rate be satisfactory as applied to each specific transaction, the scheme of rates is reasonable in its general application to the whole volume of traffic, and the public welfare has not been injuriously affected by it. Assuming the truth of this proposition, the field of investigation as to the reasonableness of rates should be confined to the reasonableness of each specific rate

as applied to each particular transaction. This is the position which the courts have taken in the definition of a just and reasonable rate *per se*. They have refused to recognize the reasonableness of the returns upon railroad capital as a criterion of the reasonableness of the rates that were to produce it.

The courts cling to the traditional analogy of railway traffic to that of common carriers on turnpikes and incline to the notion of basing rates on cost of service. As this basis is favored by most theorists, it is necessary to enter somewhat fully into a consideration of the elements which enter into the cost of transportation service, and of the effect upon that cost of the varying circumstances and conditions under which the service is performed. The turnpike distinction between highway tolls and carriers' charges was recognized in the early English charter rates and still figures in French railway tariffs. It has its place in our own tariffs and also in an analysis of the elements in their composition.

What elements enter into the cost of transportation? What are the factors that incur cost in performing the service? They are two, the plant itself and its application to the purposes of transportation. The cost of the plant may be represented by the capitalization of the railroad corporation. The interest which that amount of capital would earn in the money market is one element in the cost of transportation. In this

element is included the necessary expenditures for materials and labor to keep the plant in serviceable condition with an allowance for deterioration as well as for current wear and tear. Another element to be recognized is the expenditure for supplies and labor in the application of the plant to the purposes of transportation. These elements, in their origin, may be assimilated respectively to the construction and maintenance of the turnpike and to the expenditures made by the common carrier.

The cost of transportation may therefore be considered as composed of the following items:—

I. The lowest rate of interest at which the capital necessary for the construction of the plant could be borrowed, with the plant itself as a security for the same.

II. The lowest prices at which the materials could be obtained necessary for its preservation in its original serviceable condition, and the lowest wages at which the labor could be obtained for the same end. These are the items of cost in the construction and maintenance of the plant.

III. To these are to be added the lowest prices for supplies and labor in the application of this plant to the purposes of transportation.

These items, in their total, constitute what may be termed the bare cost of transportation. They represent the lowest possible terms on which the service of

transportation by rail could be rendered to the public, for they include no profit whatever, not to any one; not to the promoters of the enterprise, for these receive nothing more than the interest on the money borrowed to construct the plant; nor to the employees, for they are supposed to have received nothing more than the pittance necessary for the support of themselves and their families. Both employers and employees must receive any further compensation from an addition to the transportation charges above the bare cost of transportation, from that part of them which yields a profit.

Here is where the question comes in as to what is a reasonable return in the application of rates as a compensation for the service performed. What is a reasonable return to those who have invested in railroad stocks, hoping for some return after the bondholders have received their interest? Are they not reasonably entitled to a greater return than the bank rate of interest on secured loans? This is especially true of the managing owners, the so-called captains of industry, who have likewise directed their energy, experience, and intelligence to the application of millions of capital to this public service. There are other interests that claim an additional return upon their investment. One interest is that of the wage-earners, from the general manager to the track hand, who have put their capital also into the work of transportation, — their health and strength, intelligence, experience, some

at the risk of their lives. Upon this investment of capital only a mere pittance is included in the bare cost of transportation.

But as their captains are entitled to a fair return above the interest on their investment, so are those who compose the rank and file entitled to a fair return on theirs. For we have to remember that every allowance of an increase of pay above the lowest standard of wages does not come out of the compensation for the bare cost of transportation, but from the additional allowance thereon which represents a fair profit. There is yet another interest to claim a share of this profit: the inventive genius which has made the railroad possible as a new factor in our material civilization; the brains that have devised the many appliances and processes which have increased its efficiency as a transportation machine,—the inventors of air-brakes and automatic couplers and block signals, of powerful locomotives and sleeping cars and refrigerator cars, of improved processes for making steel rails, for sinking deep foundations, and for excavating tunnels. All these men demand and rightfully claim some part of the return for their services above the bare cost of living.

The profit from the service is therefore that part of the compensation which remains after deducting the bare cost of transportation, and represents something more than the dividend fund. For of this margin

of profit, a part is to be distributed among all these men as a fair return on their respective investments of money, labor, experience, and genius; and as this margin is reduced, so is their reward. Reasonable rates based on the cost of transportation should therefore include a margin of profit sufficient for these purposes, and, if this basis be accepted, we have a standard of reasonable rates; that is, as applied to the gross returns from these rates. But how can such a standard be applied to the incidence of compensation for each specific service?

When this stage in the exposition of the theory of rate-making is reached, in the application of general principles to a particular case, the basing of reasonable returns either on capitalization or on cost of transportation is of no value. How is the accepted aggregate of reasonable returns to be applied to each of the myriads of transactions represented in that aggregate? At this point, the theorist steps aside and the duty devolves upon the railroad company to fix a specific rate of compensation for each service performed.

Each service performed in transportation is of a twofold character. It is partly receipt and delivery, and partly transmission. The former is irrespective of distance, the latter is not, and the element of cost attaching to receipt and delivery is irrespective of the length of the route over which the service is performed. Therefore, in fixing rates for varying distances, for

them to be just and reasonable, one element should be constant and the other variable with the distance. Yet a rate made on this basis might not be a reasonable one, for it would be made solely in the interest of the party performing the service, with no recognition of the interest of the party for whom the service was performed. What has the cost of that service to do with its value to him? What has the cost of anything to do with its value to the purchaser? Its value to him is in his need for it. The maximum charge which he will pay is limited by his desire for it; the minimum price at which it can be furnished is the bare cost of performing the service. Between these limits is to be found the just and reasonable rate. Reasonableness is a balance between conflicting interests or motives, and the interests that conflict in the fixing of a freight rate are those of the common carrier and of the shipper; and the just mean would seem to be a rate which recognized equitably the cost to the carrier and the value to the shipper of each specific service.

The making of passage rates is less complex than that of freight rates. Its basis is more clearly referable to the mileage rates of stage coaches and post chaises, and passage rates have therefore more closely conformed to simple notions as to proportioning rates to distance and to conveniences furnished in the way of comfort and speed. Such a basis is easily comprehended as just and reasonable, therefore popular

opinion has never been sufficiently agitated on the subject of passenger fares to make it a political issue, not even as to pooling passage earnings, which is permissible under the provisions of the Interstate Commerce Act. There is therefore not much to be said as to the difference in the theoretical and the practical views of rate-making on passage traffic, since they are so nearly alike. It is with reference to making rates on freight traffic that opinions diverge.

View this matter as you may, the distinction between competitive and non-competitive business is always in evidence. Rates on non-competitive business are stable because they are not the result of frequent bargains, but conform to an ancient standard in which the rate of compensation included all the elements of the cost of service. In this respect local freight rates and passage rates in general are made on the same basis. This basis has long been buried out of sight, but it is still there. It is represented in theoretical rate-making by maximum rates. Travellers in general pay maximum rates because they must travel. Excursionists pay minimum rates because they need not if they do not want to. The local shipper is in the same condition as the ordinary traveller. He *must* ship his products to market or he *must* have his goods for sale. The traveller may have a choice of routes, but the local shipper has none. Maximum rates for him is the unvarying rule.

In all fields of human activity, practice precedes theory; we do things first and reason about them afterward. So it has been with rate-making. Two guiding principles have ever been present in the minds of practical rate-makers: what the traffic will bear and what the shipper will stand. The first principle is applicable to making a local rate and is a primary feature, not only of rate-making, but of price-making in general. It is the basis of the economic law of supply and demand, but has never secured any very generous recognition from theoretical rate-makers. They criticise this standard for rate-making, because they interpret the rule as meaning *all* that the traffic will bear instead of all that it will *reasonably* bear. This is one of the principles observed in making a classification; that articles should be classified according to their relative value. Another principle is a crude recognition of the cost of transportation, as when articles are classified according to their relative bulk for weight. Indeed we may say that there are three principles observed in classification which are also the basis of local rates: that of relative value, that of bulk for weight, and that of inherent qualities, as fragility or of a liquid or of an explosive. Charging what the traffic will bear should be restated as what the traffic will *reasonably* bear, and this proposition is the basis of maximum rates. If the rate leave a disproportionately small profit to the shipper, it is exorbitant; if it absorb *all* of his profit,

it is extortionate. Therefore, in making maximum rates, it is the duty of the common carrier who enjoys a franchise for collection of tolls to exact no higher charge than will admit of a fair profit to the person for whom the service is performed. In making this assertion, we must recognize the limitation that the carrier shall not be expected to perform the service at a loss. A reasonable maximum rate is one, then, that admits of a fair profit to both. A reasonable minimum rate is one which enables the carrier to do business without actual loss. This, therefore, is the proper relation which should exist between a railroad company and its local shippers in the establishment of just and reasonable rates on the basis of what the traffic will bear. An argument in favor of protective tariffs is also favorable to charging what the traffic will bear, inasmuch as the extra charge on the more valuable commodity enables the company to charge proportionately less profit on the cheaper and more necessary commodities, not only to the benefit of the consumers but also to the greater profit of the capitalists and laborers thus encouraged to engage in the production of such commodities as coal, etc.

The practical rate-maker does not originate or create rates. He cannot tear out the foundations of the system to which business has become accommodated; he can only rebuild parts of the superstructure upon the same foundation. He does nothing *ab initio*, but

with reference to what has been done before. His rate-making must also bear a relation to what is going on around him, or competitive business will leave his line. Other rate-makers are acting independently of him, though not of the basis on which he works. That basis they all have in common. In non-competitive rate-making it is the standard to which they all conform; in competitive rate-making it is the point of common departure.

We have now to consider that other principle which guides the practical rate-maker, and that is, what the shipper will stand. Where there is a conflict of interests between the local shipper and the railroad company, the local shipper is at a disadvantage; but the shipper is in a different relation to the railroad company when he has a choice of routes. Then he too has a voice in the rate-making, the voice of one of the parties to a contract. For this reason rate-making is assigned to the department whose especial duty is the solicitation of business on which the rate is made to suit the shipper. It is then a matter of driving a bargain, in which the rate charged the local shipper is only recognized as a point of departure and the classified rates as a basis for special rates. Every shipper has at bottom a preference for one particular route at equal rates, and to divert his business from that route, the agent of a rival must offer better facilities or better rates. This is where the bargaining begins, and it

only ends when the rival bidding for the business stops. This is all that there is to practical rate-making on competitive business. The bidding ceases from one of two causes: either by agreement among the bidders, or because the bidding has reached so low a point that the business is no longer desirable to one of them. Usually this is the most prosperous one, who has least need for it.

We have sought for the measure of reasonableness in non-competitive rates. What is the measure of reasonableness in competitive rates? What is the measure of reasonableness in any contract relation? It is the measure of profit reached as a compromise between the conflicting interests, as in any bargain. But, as often happens, there is a third party whose interests are involved in such contracts, who has no voice in making them. From his standpoint the compromise reached may seem *very* unreasonable. This helpless third party is the local shipper. He may see freight passing his station at half the rates that he is paying, which is being hauled twice the distance. This may be merely a sentimental wrong, an injury to his feelings without damage to his pocket; but when he perceives that his long-time customers are leaving him, and he finds that they are offered goods at a near-by station at prices which he cannot afford to accept, he attributes this injury to his business to a difference in freight rates that he naturally looks upon as an

unjust and unreasonable discrimination. In this reference to discrimination, I am only referring to discrimination between localities on open, published rates, and not to secret rebates to individuals, which is an entirely different matter.

Under what conditions does discrimination between localities in the matter of freight rates become unjust and unreasonable? We say, primarily when more is charged for the short haul, or, as the Interstate Commerce Act puts it, when the common carrier charges as great or a greater compensation in the aggregate for the transportation of property for a shorter than for a longer distance in the same direction, the shorter being included in the longer distance. This on the face of it would be an unjust exaction if it were simply a toll charged for the use of the highway. To justify the lesser charge for the greater haul, we have to refer to the limitation recognized in the Interstate Commerce Act, "under substantially similar circumstances and conditions"; and in the application of this phrase to each case lies the whole contention as to unjust and unreasonable discrimination in open rates, not only as between local and through rates but also as between competitive centres of trade and between competitive regions of production.

The phrase is "substantially similar circumstances and conditions," and there is a distinction between circumstances and conditions. The circumstances,

as I take it, relate to the respective environment in any two cases. It is the environment of the competitive shipper which enables him to have a voice in rate-making, to enjoy a contract relation; just as it is the environment of the local shipper which deprives him of the benefit of that relation. In respect to environment, the two classes of shipments are not made under substantially similar circumstances; and it is not an act of injustice to the local shipper if the common carrier's rates should discriminate against *his* interests under circumstances which the carrier cannot control. The overruling circumstance in railroad rates is the existence of rival communication by water, and everywhere in our country this circumstance is effective, — along the Atlantic or Pacific coast, on the borders of the Great Lakes and the Erie Canal, in the valley of the Mississippi and its affluents, even as between the opposite coasts of the Atlantic and the Pacific oceans. Wherever this circumstance exerts an influence, the laws are silent.

This is a circumstance of natural environment. There are other circumstances of environment, as where a point not naturally endowed with the advantages of water communication becomes a centre of competition by the construction of a rival route of communication to points of distribution or of production. This is a dissimilarity of circumstances brought about through the intervention of man, and

by the same intervention the dissimilarity may be ignored or removed. It may be ignored by agreement between the rival managements, or it may be removed by legislation. Efforts to ignore this dissimilarity of circumstances in their own interests by the railroad corporations, that is, by pooling agreements, have been prohibited in the Interstate Commerce Law. The reasonableness of maintaining competition at junction points has been strongly contested by the Interstate Commerce Commission as falling outside of the limitations prescribed in the "long and short haul clause," because there is not a dissimilarity of *conditions*. This, as I take it, means that the conditions where the dissimilarity of circumstances is artificial are not necessarily conditions dissimilar to those which obtain at adjacent stations, inasmuch as the dissimilarity of environment *can* be controlled. This may be true with respect to certain conditions, but is it true with respect to all conditions?

There is one condition under which such discrimination occurs, through a dissimilarity of circumstances artificially created, which is comparable to that of a naturally dissimilar environment. Where two separate regions ship the same products to the same market by separate roads, there can be no basis for dividing the traffic of the two regions between the two corporations by agreement, and competition will diminish the rates from the separate areas of production to the

lowest point compatible with any profit to the corporation operating under the most unfavorable conditions. Other circumstances than that of an artificially created environment and other conditions than that of the power to control this circumstance are also to be recognized in determining what is just or unjust, reasonable or unreasonable, in rate-making ; as, for instance, between the different services which a railroad company renders to different shippers, more particularly between competitive and non-competitive shippers.

To assist in distinguishing between the several elements that enter into a non-competitive and a competitive rate, let us take this view of the management of a railroad property. If an operating management should lease a running railroad from its stockholders with the obligation to maintain it in first-class order, it is plain that the stockholders would claim the first element in the rate as their rent, and that the lessee would make no profit out of the next element, the cost of maintenance of the leased property ; but that all of his profit would come out of the income after paying the rental and the cost of maintenance. Therefore, the earnings from the first volume of traffic would be absorbed by the rental and those from the second volume by the cost of maintenance. The next increment in volume of traffic would necessarily be directed to paying for the labor and supplies required for per-

forming each particular service, and not until that was paid could any portion of the compensation for that service be appropriated by the lessee. From the very last increment in the volume of traffic must also come any increase in wages above the lowest possible cost of living, and also the fund for betterments. Now it is this last increment in the volume of traffic that is secured by competition, and, according to the economic law of diminishing returns, this last increment affords the least proportionate profit. On this proposition rests the justice of a discrimination in favor of the application of proportionately lower rates to competitive than to non-competitive business.

The dividend to a railroad company that operates its own property is derived from two of the elements which make up the rate; that is, from the rental value of the property and from the profit above the cost of operation. The revenue which provides the rent comes from the traffic which is non-competitive, and this pays all that it will reasonably bear. The net revenue which comes from the actual operation of the property is that which is left after paying what may be called the running expenses. The revenue from this part of the rent, which is profit, is really the result of the skilfulness of the management in finding new sources of traffic and in applying the ingenuity of mankind in the invention of economic appliances, devices, and processes to the exigencies of its own

operations. Only to the result of this skilfulness is due the increase of wages above the minimum cost of living.

As an illustration of these principles in rate-making, we may take the operations of our railroad system as a whole for the year ending June 30, 1903. In that year, the system earned in round numbers:—

From passenger service	.	.	.	.	.	\$422,000,000
From freight service	.	.	.	.	.	1,338,000,000
From mail and express	.	.	.	.	.	80,000,000
From other sources	.	.	.	.	.	60,000,000
Total gross earnings	.	.	.	.	.	<u>\$1,900,000,000</u>
Operating expenses	.	.	.	.	.	<u>1,260,000,000</u>
Net earnings	.	.	.	.	.	<u>\$640,000,000</u>

These net earnings were devoted as follows:—

Taxes	.	.	.	.	.	.	\$58,000,000
Interest on funded debt	.	.	.	.	.	.	269,000,000
Dividends	.	.	.	.	.	.	166,000,000
Permanent improvements	.	.	.	.	.	.	42,000,000
							<u>\$535,000,000</u>
Surplus	.	.	.	.	.	.	105,000,000
Total	.	.	.	.	.	.	<u>\$640,000,000</u>

The total earnings from passenger and freight service amounted to \$1,760,000,000. Assuming that all the operating expenses, \$1,260,000,000, were paid from this fund, there was left a balance of \$500,000,000, and the remaining \$140,000,000 of net earnings was derived from other sources.

The total earnings from passenger and freight service were divided respectively 24 per cent and 76 per cent; at the rate of 2.006 cents per passenger-mile and .773 cent per ton-mile. On the same ratio, these earnings were devoted as follows: —

	EARNINGS IN CENTS	
	Per Passenger-mile	Per Ton-mile
Operating expenses	1.440	.554
Taxes	0.066	.025
Interest on funded debt	0.307	.118
Dividends	0.190	.073
	<u>2.003</u>	<u>.770</u>
Surplus	0.003	.003
Total rate per mile	2.006	.773

The entire receipts from passenger and freight service were therefore virtually exhausted when the dividends were paid; and the permanent improvements, \$42,000,000, and the reserve fund, \$105,000,000, were provided for from other sources.

The contributions to the dividend fund from passenger and freight service respectively may also be determined. The passengers transported during the year numbered 695,000,000, and the average journey of each was 30.1 miles, being at the rate of 60.38 cents for the journey. The cost to the railroad system for each passenger in expenses, taxes, and fixed charges was 1.813 cents per mile or 55.57 cents per journey; so that each contributed, on an average 4.81 cents to the dividend fund for each journey. If therefore the passage rate had been reduced to actual cost, each

passenger would have saved less than the cost of a street-car ride for each average journey.

The total tonnage for the year was 639,000,000 tons, on an average haul of 271.16 miles at .773 cent per ton-mile; so that the charge on each ton per average haul was at the rate of \$2.096 per ton or about 10½ cents per 100 pounds. The profit on this service was .003 cent per ton-mile, and for the average haul per ton, .81 cent, or .04 cent per 100 pounds; therefore, if the average charge for transporting a barrel of flour was 21 cents, the profit would be .08 of a cent, and that would represent the savings to a family on each barrel of flour consumed if it were transported at actual cost. It would seem therefore that, taken as a whole, railroad charges in this country are neither unreasonable in themselves nor do they result in unreasonable profits.

There is another aspect of this subject which should not be overlooked, and that is the effect of additional increments of traffic upon the net earnings of a railroad company. Taking the same traffic statistics of our railroad system for 1903, the volume of traffic can be shown that had to be performed before any profit resulted from such performance:—

695,000,000 passengers contributed	.	.	.	\$422,000,000
639,000,000 tons of freight contributed	.	.	.	<u>1,338,000,000</u>
Total	.	.	.	<u>\$1,760,000,000</u>
Cost of operation	.	.	.	<u>\$1,260,000,000</u>
Taxes and interest	.	.	.	<u>327,000,000</u>
Total	.	.	.	<u>\$1,587,000,000</u>

On the basis of respective contribution to earnings, the cost of operation required the transportation

Of 500,826,425 passengers at 60.38 cents per journey to contribute		\$302,400,000
And of 456,393,130 tons of freight at \$2.096 per ton to contribute		<u>957,600,000</u>
To provide for operating expenses of		\$1,260,000,000
Also for taxes and interest, 130,000,000 passengers to contribute	\$78,480,000	
And 118,568,700 tons of freight	<u>248,520,000</u>	327,000,000
Total		<u>\$1,587,000,000</u>

So that, before any contribution was made to the dividend fund, the railroads of this country had to transport 630,826,425 passengers and 574,961,830 tons of freight; and it was only from the last increment of about 64,000,000 passengers and as many tons of freight that the dividend fund was obtained. This statement illustrates the value to a railroad company of additional competitive traffic as a source of profit, at any rate above the cost of the service.

These deductions from the traffic statistics of our railroad system show that the end to be sought in the regulation of rates is not to be attained by a reduction in the general charges, but in an equitable distribution of them, in a shifting of the burden from shoulders that ought not to bear them to those that should. Consequently any reduction of a rate on one commodity

or service calls for an addition to the rate on some other commodity or service, if the just and reasonable average of rates and profits is to be maintained.

What is the view to be taken of rate-making from the standpoint of the person for whom the service is rendered? It is to his interest that it shall be rendered with safety and despatch and at the least possible cost to him. These conditions are secured to persons who are so situated as to have a choice of routes, limited only by the bare cost of performing each particular service for them, while persons who are not so favorably situated must not only pay a charge sufficient to cover the bare cost of this service, but an additional charge to provide for the rental and cost of maintenance; and it is this element of the charge that is really the bone of contention between local shippers and the railroad managements.

The part of the rate which constitutes the profit above the cost of transportation is fixed by the rate-maker in making maximum rates. In practice he adopts some existing tariff and applies it to his business. If its application to the volume of his traffic does not furnish satisfactory returns, he raises the rates to accomplish this purpose. He does not necessarily advance the rates proportionately as a whole, but adjusts the advance in accordance with what he thinks is the relative desire for the service as applied to the transportation of different commodities for different

distances, the object being to derive a profit from the sum total of all the transactions sufficient for the requirements of the corporation. Those requirements, however urgent may be the needs of the corporation, however rapacious its demands, are limited by the desires of those who must have the service and by their ability to pay for it.

This is the ultimate basis of maximum rates: a relative shifting of the incidence of rates from those who cannot afford them to those who can, from articles not desired by consumers to those which are desired, from articles in whose value, by reason of great bulk or weight and small prices, the charge for transportation constitutes a large element of cost to those to which, by reason of their small bulk or weight and large price, an increase in the rate adds but little cost. It is this matter of incidence which determines who *must* pay the maximum rate and who need pay only the minimum rate, and this incidence is greatly affected by dissimilar circumstances of environment and by dissimilar conditions of service. It is a matter not always or altogether to be controlled by the will of the rate-making power, wherever that may rest. For, on a fixed volume of traffic, the rates cannot be increased indefinitely to secure a satisfactory profit. The people must pay the maximum rate for the service essential to their necessities and will pay them for what is only desirable to the point when that desire

ceases or where it is no longer profitable to them; a condition is then reached in which the profit to the railroad company also ceases. Therefore the company must keep this point in view, that the charge for transportation must always leave some margin of profit to the user.

This principle comes to the front when it is sought to increase the total revenue by inducing an increase in the volume of traffic. To accomplish this, some industry is selected in which production languishes by reason of its small returns. By decreasing the rates on the products of such an industry, the margin of profit to the producer may be so increased as to stimulate the output; and so long as this special service is performed above its bare cost, there is a continuing increase in the profit derived by the application of special or commodity rates to this class of traffic. Nor is the service performed for the general public thereby unfavorably affected either as to its character or cost. In fact, in the development of such an industry, the public welfare is benefited.

We have here looked upon rate-making as applied to an isolated corporation, to one which has absolute control over the transportation facilities of the region which it serves. But suppose that the line of such a corporation be extended into a region already supplied with adequate facilities. How much of the theory of rate-making applies to this change of environ-

ment? What are maximum rates under these dissimilar circumstances? Evidently the highest rates which those already enjoying adequate facilities are willing to pay for the alternative service which the intruding corporation proffers. This is that region of substantially dissimilar circumstances referred to in the Interstate Commerce Act, and the intruding corporation must necessarily conform to the dissimilar conditions that preclude rate-making on the theory of maximum rates.

To secure any of this traffic it must at least conform to prevailing conditions as to rates for distance, as to classification, etc., regardless of its previous tariffs. If its management be energetic, it will compete for all the traffic that is offered; if it be prudent, it will set a limit to the price at which it will perform the service. Where shall that limit be set? At what point shall the minimum rates be fixed on competitive traffic? Certainly at the point at which it ceases to be profitable, at the bare cost of transportation. This brings up anew the question as to the bare cost of transportation; whether that cost may vary with the character of the service performed or with dissimilar circumstances and conditions.

If we consider maximum rates as applied to all the traffic of a railroad, we may say that the bare cost of transportation will apply primarily to the length of the haul as covering the proportionate investment in

roadway, also as covering the wear of rolling stock, the cost of fuel for locomotives, the wages of trainmen, and the cost of train supplies, so far as these items of cost are affected by the length of haul. But there are other items that are independent of the length of haul; that is, the cost and maintenance of terminals, and the cost of receiving, loading, unloading, and delivery of freight. These items vary with the terminal conditions and the character of the commodities, without reference to the distance that they are transported. It is this class of constant charges which governs in the diminishing ratio at which rates are increased for distance, in order that the value of the article should not be absorbed in the charge for long hauls.

Both these considerations should govern in fixing rates on competitive traffic; that is, the cost of the service as proportionate to distance and as to terminal cost. The latter class of charges applies clearly to both local and competitive traffic, except so far as they may be affected by the volume of either or by conditions peculiar to either. There is no contention on this point. But the contention arises with respect to those items of cost that are affected by distance, that is by the "long and short haul clause" of the Interstate Commerce Act, as applied to transportation for a shorter and a longer distance over the same line, in the same direction, the shorter being included within the longer distance.

When the railroad rate-maker is making rates on competitive business, he recognizes the terminal cost, but he discriminates among the items of cost referable to the length of the haul. He recognizes only those applicable to the particular service to which the special rate is to be applied, and ignores all other items that apply to the long haul in a general way. He figures on the car mileage, the cost of maintaining and operating the engine per mile run, the wages of the crew, and the cost of supplies per mile, and, taking these items all together, he determines the cost at so much per train-mile, adds the terminal cost for handling the train load, and thus arrives at the cost of transportation which he applies in fixing the rate per 100 pounds on the train load.

This is in theory the basis of rate-making on competitive traffic from the railroad standpoint; and any business that can be obtained above this basis of rates is considered a source of profit. In the rate-maker's calculations he has ignored the investment in track and buildings, their maintenance and deterioration and the cost of administration. He goes farther in competing for a *car-load* of freight. Here he considers only the car mileage expenses and the cost of handling, for he views the other items of train expense as inapplicable to a single car-load. He goes still farther when it is a question of securing a load for a car that would otherwise return empty. Here whatever earn-

ings the rate will procure above the cost of handling he looks upon as profit, which is not surprising; for in 1903 the empty car mileage on our entire system was 4,350,000,000 car-miles, about one-half as much as the loaded car mileage.

The railroad rate-maker therefore makes the rates on competitive business according to three dissimilar conditions: first, when he has to furnish an engine and train of cars for it; second, when he has only to provide cars to add to a train that is going anyhow; and third, when he wants freight for empty cars. Under neither of these conditions does he consider that interest on the investment in track and buildings or the general administrative expenses are elements in the cost of doing competitive business. This, of course, is not true with reference to the large expenditures incurred in providing terminals, second track, and equipment for the competitive traffic of the trunk lines. The interest on such investments and the expense of their maintenance are recognized as charges upon competitive traffic.

The great economies that have been accomplished in diminishing the cost of train service in general are directly applicable to competitive traffic in large volume; for only in a service of this character can the economic advantages be fully developed of heavy engines drawing long trains of cars of maximum capacity. These economies enable rates to be lowered on the very cheap-

est classes of commodities, those which affect most vitally the welfare of the people in general. They permit of a margin of profit from very low rates on such commodities, especially on long hauls without loss of time in the delay of rolling stock and with a small cost for loading and unloading the cars. Such conditions occur most favorably in the carriage of grain from Western centres of concentration to the Atlantic seaboard.

If the rate-maker ignores any apportionment of administrative expenses and any returns upon the general investment in immovable property in estimating the cost of doing competitive business, these items must be provided for in some way out of the traffic, and therefore they must become an element in the maximum rates applied to local traffic.

Where such a discrimination does exist, what are the circumstances or conditions which make this discrimination just or unjust, reasonable or unreasonable? We have already seen that where the circumstances of environment are natural, the competing railroad must conform to them to secure competitive business; and the local shipper cannot claim that any rates on this business are unreasonably low which contribute any profit to the fund from which the interest on the investment in property and the cost of maintaining that property are to be paid; for to the extent of that contribution his business is relieved from payment to the same fund.

This proposition assumes another aspect when the dissimilar circumstances are artificial; when the point of competition is a railroad junction which only becomes competitive by the action of two or more corporations. Here it is plainly within their power to regulate the basis of competitive rates at their discretion and to keep them, if they please, in line with the maximum rates on their other traffic. This is what the corporations sought to do through pooling agreements. If this argument be sound, it is unreasonable for a railroad company to accept business at a point of natural competition at or below the cost of the service actually performed, and it is unjust to persons at intermediate stations for two railroad corporations to discriminate in favor of junction points.

Discrimination in favor of certain industries by commodity rates, above the actual cost of the service performed, is justifiable, since the volume of traffic is thereby increased without injustice to the persons furnishing the ordinary traffic. Discrimination in favor of places enjoying natural facilities for transportation is admissible, provided the special rates are not so low as to throw any additional burden upon local shippers. Discrimination in favor of junction points is unjust to shippers at intermediate stations. Discrimination in favor of persons is unjust and unreasonable and an abuse of the franchise for collecting tolls.

Pooling associations are conveniently organized for conferences in establishing uniform rates or for similar purposes in connection with competitive traffic, though their specific function is not to make rates, but to maintain existing rates on competitive traffic. In the exercise of this function they have served to hold the rates uniform and stable at all pooled points rather than to advance them; for the dissimilar circumstances and conditions prevailing at those points are generally beyond their control in this respect. Where the pooling associations have been strongest, rates in general have declined in common with rates where the traffic was not pooled, and since the prohibition of pooling, rates have shown no further decline of importance. Pooling associations have also been of service in asserting the claims of rival areas of production to an equitable recognition in a common field of consumption. The demands of manufacturing interests to compete in Southern territory, which had long been purveyed exclusively in the interest of the North Atlantic seaboard, were championed by the Central Traffic Association and resisted by the Southern Railroad and Steamship Association, until a compromise border line was established by mutual concessions.

It is the possibility of mutual concessions which preserves the flexibility of rate-making by internal control among railroad corporations. They are interested in securing the highest probable profit from the greatest

possible volume of traffic. This purpose, intelligently pursued in rate-making, brings the interests of the common carrier and his customers into accord to the greatest extent practicable, provided that the latter are protected against unjust personal discrimination. It is in the discrimination between areas of production or centres of distribution that the greatest difficulty is to be found in harmonizing their interests. This is the most difficult problem in rate-making, and is the one which even theorists have not been able to solve to their own satisfaction.

Theoretical rate-making has assumed greater practical importance since the question of enlarging the power of the Interstate Commerce Commission has become a political issue, and its relation to practical rate-making problems will be further considered in the succeeding chapters.

CHAPTER VIII

REGULATION OF RATES

IN previous chapters the results were described of unrestricted competition. While stimulating favored centres and interests, it disturbs the general equilibrium by questionable methods and with far-reaching injustice and abuse. It has, in fact, aggregated the productive, industrial, and commercial activities of the country into two classes, those which have profited by competitive rates, and those which have not been so favored. The traffic furnished respectively by these classes is known as through and local. There is another distinction that might be applied to the two classes of persons which respectively furnish through and local traffic. This classification rests upon their relations to the routes on which they depend for means of communication. The shipper at a competitive point has a choice of routes and voluntarily selects one of them. His relation to the route which he selects is that of contract, and so long as the railroad company complies with the terms of that contract he has no grievance. But the shipper who has no choice of routes can occupy no such relation. His relation to the railroad corporation is rather one

of status, and can only be modified at the will of the corporation, within the limits of its charter and of the common and statutory law.

At first, the corporate will and power were directed sedulously to securing the business of those who were free to divert it, but, as they drove harder bargains and the net earnings from their business began to shrink, the duty which the managers owed to stockholders and bondholders pressed sharply upon them. Yet they were powerless to retrieve the situation, for their friends the shippers became their enemies when it came to raising rates. At the first intimation that such a purpose was contemplated, they were swift to contract with rival corporations. In this dilemma there was but one course to be pursued by managements that were earning dividends. That was to make overtures to their weaker rivals; in other words, to endeavor to contract with them rather than with the shippers. The many separate companies began to group themselves for mutual support, under the leadership of the more influential managements, in each line of roads jointly interested in competitive business.

The early attempts to regulate traffic by conferences were not directed to freight traffic. The through business which at the time was most affected by competition was the passenger traffic, especially between New York and the Great Lakes. The New York Central and the Erie Railroad companies became

involved in a war of passage rates that disturbed all passenger traffic between the North Atlantic cities and the West; and the first agreement to maintain rates which became public was one with reference to this traffic, made in 1858, between the presidents of the New York Central, Erie, Pennsylvania, and Baltimore and Ohio railroad companies. Passage rate wars were not thereby abolished, but the competition was more easily controlled than when it began to be prevalent in freight traffic.

The spirit of competition in freight traffic was fermenting before the Civil War, but its effects were not felt until the return of peace. Then began the rapid extension of railroads in the fertile prairie regions, with an accompaniment of immigration before unexampled and a consequent increase in the products for transportation. It was in this tempting field that unrestricted competition did its worst. Shippers at competitive points had things all their way, while local shippers could only look on and revile. The business originating west of Chicago was drawn there by rival lines, to become again the object of competition between competing lines to the seaboard. The effect of this mad rivalry upon industries situated west of Chicago and at intermediate points on the lines to the seaboard was unheeded.

Some instances may be cited to contrast the situation of shippers at competitive and intermediate points.

Minneapolis millers imported grain from Dakota and undersold Iowa millers at their own homes, though these had brought their grain from the same region. It cost \$130 to ship a car-load of wheat within the State of Iowa over the same road that took the same wheat from the same point of shipment to Chicago for half the price. The rate from Council Bluffs to Chicago on hogs and cattle was from \$25 to \$40; other points on the same line paid \$70 per car-load for shorter distances. Davenport, Iowa, shippers hauled their shipments across the Mississippi River to obtain the advantages of competitive rates from Rock Island. Illinois coal undersold Iowa coal within 50 miles of the Iowa mines, though it had been transported 500 miles. The charge for hauling a car-load of freight from Chicago to Pittsburg was greater than for taking it to New York, because the only road into Pittsburg held up the rates while those to New York were kept down by competition.

The situation reached its worst in 1873, and in 1874 the first really important step was taken to control it. In that year an effort was made to form what has been called a Trunk-line Protectorate. A central board was organized, composed of representatives of each of the trunk lines. This board was to make tariffs on competitive business westbound, and was to be the medium of conciliation and arbitration in controversies arising among the associates. This was a well-meant

attempt to substitute an organization responsible for the maintenance of some kind of equilibrium between the rates paid by those who could help themselves and by those who could not, in place of dividing that duty among hundreds of obscure and irresponsible agents; but it was not favorably received by the public.

The people did not look sufficiently into the character of their troubles to see what the ultimate causes really were. As is usually the case when popular feeling is aroused, a victim was sought rather than a remedy, and the parties to the Saratoga conference, the so-called Trunk-line Protectorate, became the target for newspaper writers and politicians. The charge against them was that they sought to suppress competition. Notwithstanding all the misfortunes which unrestricted competition had wrought upon them, the people resented this attempt to regulate it. The purpose to preserve net earnings was held to be an improper one, and steps were taken to procure legislation that would make similar efforts illegal. Such legislation was instigated by the interests which feared to lose the advantages of unrestricted competition, and was heartily supported by those which had not profited by it; and with this unanimous support the will of the people had its way.

The Saratoga conference was dissolved into its constituent elements by intestine dissensions, and another rate war broke out in 1875. This time it was not so

much a war between rivals for the traffic of New York and Chicago. It was instigated by a line which had no terminus in either and was for the most part without the borders of the United States,—the Grand Trunk Railway Company of Canada. This company resorted to tactics which gave a new aspect to competition. Chicago and New York could no longer view a rate war with complacency which removed the centres of competition to Milwaukee and Boston. The Chicago merchants became very much excited at the disregard shown them when the trunk lines declined to follow the lead of the Grand Trunk Railway Company in a still further reduction of rates, and it was openly avowed in the Chicago Board of Trade that what Chicago needed was “a bankrupt railroad company with a trunk line to New York under a permanent receiver.” But when the Boston merchants had rates one-half those paid by New York, the trunk lines had to do something in their joint interests with the New York merchants, so in 1875 a new basis of agreement was sought in a division of traffic; but this soon fell through from dissatisfaction among the lines out of New York, and a still more disastrous fight ensued among the trunk lines themselves.

The ills of unrestricted competition had forced the Western connections of the Pennsylvania and the Baltimore and Ohio railroad companies into closer corporate relations with them, and now Philadelphia and

Baltimore appeared as rivals for the traffic which had hitherto centred in New York. This added new complications to the trunk-line competition. The volume of traffic to be fought for had been largely increased by the extension of the productive area of the country, and low rates had diverted much of its business from the water routes to the all-rail lines. In three years, from 1873 to 1876, the all-rail proportion of business common to both had increased from 30 per cent to 52 per cent, and a new field for competition was offered in the export grain business. In the contest for the export business, the rates were reduced far below those on domestic grain and much of it was diverted from New York to other ports, a tendency which was only arrested by an allowance of differentials as a compromise measure to secure a maintenance of rates, but on a lower basis than had before existed. This measure, like that of the Trunk-line Protectorate, incurred the disfavor of those who profited by it and of those who were thereby deprived of the advantage of unrestricted competition. The New York grain shippers, who paid the full rate, objected to the differentials, and the shippers from the other ports complained that the margin of difference was not sufficient for them to do business, while the sellers in the West felt that every cent added to the export rate was money out of their pockets.

The New York Central Railroad Company had to bear the brunt of this contest. It was between two

fires, that of the New York merchants and that of its rivals. In desperation, its management withdrew from all agreements in 1876, whether relating to passengers or freight. The passenger rates from Boston and New York to Chicago were cut \$11, first-class freight rates westbound from 75 cents to 25 cents and grain rates to 18 cents, with still lower rates to large shippers. For months this class of freight was hauled at from $3\frac{1}{2}$ to 3 mills per ton-mile. This fight was all brought about by the attempt to force the other North Atlantic ports to maintain the same rates as were in effect on New York business. The New York Central Railroad Company encouraged the concentration of eastbound business at Buffalo by putting such low rates into effect from that port to New York as to deprive the Erie Canal of its traffic. On the whole, this policy triumphed. The Pennsylvania Railroad Company ceased to pay dividends, and the management of the Baltimore and Ohio Railroad, before intractable, was ready to discuss terms of settlement, which resulted in the recognition of agreed percentages instead of fixed differences in rates to the North Atlantic ports.

All this time the railroad companies in the South Atlantic and Gulf States were having troubles of their own. In the South Atlantic States, the railroad systems concentrated respectively on Charleston and Savannah. Each of these ports was connected with New York and other North Atlantic ports by steamship lines for the

freight traffic of those States, except that the larger part of the export cotton traffic was carried on directly with Europe. As the railroads were reconstructed after the Civil War, competition ensued between the lines centering on Charleston and Savannah, which led to rate wars similar in kind, though not in extent, to those that were going on at the same time in the Northern States. The volume of traffic was less than that was affected by them, but the rates were higher and had farther to fall. The results upon net earnings were even more disastrous. Every railroad corporation in the States of South Carolina and Alabama went into the hands of receivers; but two or three escaped in Georgia and the adjacent States. As railroad communication was restored from Norfolk and Richmond to the region beyond the Alleghenies, the traffic of Tennessee and Mississippi became involved in the South Atlantic rate wars, and the corporations controlling these lines also followed in the train of bankrupts. The wave of competition rolled onward to the Mississippi and Ohio rivers and drew the rapidly increasing traffic from the West into its whirlpools. The rates on competitive business were reduced to absurdity, and the general freight agents would meet occasionally and restore them, only to have a starting-point for another series of reductions.

While the freight agents were reducing the corporations to bankruptcy and the railroad presidents had found it impracticable to accomplish anything by confer-

ences, an attempt was made to establish a more permanent understanding among the parties interested which resulted, in 1875, in the formation of an association that included the steamship lines to the North Atlantic ports, entitled the Southern Railroad and Steamship Association. This association was of little more benefit than as an organization for conferences to restore rates to a basis for less ruinous competition, until resort was had to a plan which introduced an element of human interest into something that was otherwise an abstract proposition. The articles of association constituted a mere naked contract, without any security other than good faith for compliance with its terms, and good faith had been too sorely tried for it to continue as the basis for a practical maintenance of rates. It was plain that the reasonable regulation of rates by internal control could only be assured by dissociating the power to fix them from the duty of soliciting business. The plan of pooling was then introduced. A basis of division was established to which all agreed to conform. The division was made between the principal routes and was subdivided among the members composing each route. For any surplus of tonnage above its allotment each party paid into the association treasury 80 per cent of its gross receipts on such surplus, which was distributed proportionally among the parties in deficit. A committee supervised alterations in rates, and disputes were submitted to a board of arbitrators whose decisions were final and became precedents.

The Southern Railroad and Steamship Association came nearer to fulfilling the purposes for which it was intended than any other ever formed for the regulation of competition in this country. Albert Fink, who had been largely instrumental in moulding its form, was then invited by the trunk-line managements to formulate something of the same kind in their field of competition. They formed the Joint Executive Committee, agreed upon an allotment of westbound tonnage, and appointed Mr. Fink as their commissioner to supervise its apportionment. In order to make the actual tonnage conform to the allotments, an effort was made to have all bills of lading signed at offices under the common control, so that the business might be diverted to the lines in deficit; but this proved impracticable. The scheme in consequence lost much of its value. This was a pooling of tonnage alone, while that of the Southern Railroad and Steamship Association was one of tonnage equalized by money payments on a basis that made it unprofitable for any line to carry more than its allotment of pooled tonnage. The control of the Southern Association was gradually extended to include nearly all traffic of a competitive character in the States south of Virginia and Kentucky and east of Mississippi, while the trunk-line pool covered only the westbound business from New York. The lines from the other ports, however, were allowed certain differentials as on the export grain business, but the

Grand Trunk Line became again a cause of disturbance by great reductions in rates from Boston, until it was placated by considerable concessions; and to the Grand Trunk Railway Company Boston merchants really owe the position which they have since enjoyed in competition with their New York rivals for the trade of the West.

An attempt was also made to pool the eastbound business under the supervision of a commissioner at Chicago, but this proved impracticable. All that the trunk lines could do was to insist on receiving their full share of the eastbound rate and to let their Western connections do the cutting in their own proportions of the through rate. They also formed pools among themselves in certain classes of traffic, in which their allotted proportions were secured through the intervention of prominent shippers, known as "eveners," who, for a consideration of course, diverted their own shipments as required to accomplish that purpose. The Standard Oil Company at one time fulfilled the same purpose in the oil traffic. Minor associations among the lines west of Chicago were federated as the Western Traffic Association. The principal one covered the territory west of the Missouri River and was known as the Trans-Missouri Association. In 1885 the trunk lines converted their tonnage pools into money pools, which exerted a beneficial influence upon the maintenance of competitive rates until the abolition

of all pooling associations engaged in interstate commerce.

We have seen the gradual evolution of a system for the regulation of rates by internal control among the corporations interested in the pecuniary results of such regulation. It began with the regulation by separate action of each company looking only to its own interests; then it was sought to secure a maintenance of rates in the general interest, by occasional meetings of railroad officials. But nothing of value was derived from these meetings until the officials became associated in a permanent organization, which was the instrument for securing to each corporation an allotted portion of competitive business under an agreement for a pecuniary compensation for any deficit.

The pooling associations also accomplished a most useful purpose in establishing uniform systems of classification in the territories in which they exerted a control, so that now there are virtually but three systems of classification throughout the country. They secured the observance of rates that were open to everybody. Arguments against pooling are inconclusive which treat it as an unlawful factor in maintaining rates. To be of force they should be directed against legalized pooling under proper restrictions. If these associations had been legalized, the effect of such rates upon competitive traffic would have been a matter of public information; and, if the open rates had resulted in excessive net earn-

ings, that fact too would have been known and measures for reducing them in the public interest could have been readily applied. This view of pooling associations has commended them to favor with the governments of continental Europe, and the roads under State ownership are parties to such associations. The Railway Clearing House of Great Britain is recognized and upheld by the government, and one of its important functions is that of administering pools or "joint-purse arrangements."

The rate wars that bankrupted the railroad companies gave rise, about 1870, to popular agitation in the Western States. It had its seat in the rural districts and interior towns that had either been populated or benefited by the railroads. These people could not understand why they should be denied the same rates which were being charged on goods and produce that passed their stations over the roads for whose construction they were being taxed and to whose owners their money had been paid for farm lands that were once public property. This agitation was intensified by the losses consequent upon the foreclosure sales of railroads built largely with the public credit, and by the consequent cessation of competition as that property became consolidated by the foreign owners of the reorganized systems.

The agitation against railroads spread among the farmers who were associated in the State Granges.

The politicians were quick to perceive its possibilities as a campaign issue and fanned the agitation into a flame of indignation against railroad stockholders, bondholders, and officials. In speeches and newspaper articles they compared the officials to robber barons practising extortion on the public highways and denounced as bloated bondholders those capitalists who had purchased the railroad property at foreclosure sales. The interests which had really benefited by unrestricted competition joined in the cry against reorganization and consolidation, and the railroad corporations were without advocates either in the legislatures or in the editorial columns.

Their opponents had but one idea, to force the application of competitive rates to non-competitive business. In their first attempts, their zeal outran their discretion, and they overshot their mark. In 1873 the granger law of Illinois was decided to be unconstitutional. The grangers made this decision a party issue in the election of judges, elected their ticket, and the State constitution was revised to meet the judicial objections.

The fever spread into other States, and, as the anti-railroad party gained control of the legislatures, restrictive statutes of exceptional harshness were enacted under the guise of general railroad laws. The legislatures found it impracticable to regulate rates directly, and provision was made for their regulation by the creation of boards of commissioners, which to a con-

siderable extent assumed control of the management of the railroads in a sense hostile to the interests of their stockholders. The legislation was so drastic that the railroad managements united in using the Dartmouth College decision as the means of taking their cases to the federal courts.

In 1876 the United States Supreme Court confirmed the power of the States to regulate charges for any public service. Its decision was not based upon the grant of a franchise, but upon the exercise of the "power inherent in sovereignty — to regulate the conduct of its citizens toward each other and, when necessary for the public good, the manner in which each shall use his own property," which seems to be a definition of the police power. The application of this principle was afterward modified so far as the granting of a franchise might be viewed as a contract between the State and the grantee, in which the State voluntarily limited its own power and certain rights might thereby have become vested in the grantee. But the Supreme Court further held that no such provision could limit the constitutional power of a legislature to determine what are the just and reasonable charges of a common carrier. These decisions determined that the charges made by railroad corporations might be regulated by an authority external to their own, by the sovereignty of the State, and that this power antedated not only railroad charters, but even the existence of any franchise

whatsoever. They did not, however, definitely determine the points connected with the delegation of the exercise of such power to an administrative body.

At any rate, the State commissions were now free to act, but they found themselves competent to deal with but a small part of the traffic in which the people were interested, as they had no authority over any of it that only began or ended within the State. The truly national character of the so-called railroad problem became recognized, and the agitation was transferred to Washington. There the subject received consideration more in accordance with its importance than the heated advocates of regulation by force had been willing to give it in the State legislatures. In 1878 the inchoate powers of Congress to regulate interstate commerce were formulated in the Reagan Bill, which only passed the House. But after a full hearing by a senate committee and prolonged debates in both houses, a result was finally reached in the Interstate Commerce Act of 1887.

The idea of the regulation of compensation for a service rendered to the public was not a new thing. It had been for centuries recognized as a fundamental principle of common law. The question was only as to the extent and mode of regulation. But when the power to collect tolls had become merged as a franchise into the corporate rights of a railroad company as property and had been made not only a basis of investments but also a pledge for debts, then the question arose as

to whether, in granting the franchise, the State had not also limited its previous freedom of regulation; and really this was all that remained for discussion as to the regulation of railroads by the State. Congress took this view of the subject, and, in the Interstate Commerce Act of 1887, laid down certain limitations of the power of a railroad corporation: first, that charges should be reasonable and just; second, that there should be no discrimination in rates as between persons "for a like and contemporaneous service in the transportation of a like kind of traffic under substantially similar circumstances and conditions"; third, that there should be no undue or unreasonable preference or advantages given to persons or localities as to any particular description of traffic; fourth, that reasonable facilities should be afforded for the interchange of traffic between connecting lines and that there should be no discrimination in charges as between such connecting lines; fifth, the "long and short haul clause," — that no greater charge should be made for transportation "under substantially similar circumstances and conditions, for a shorter than for a longer distance over the same line in the same direction, the shorter being included within the longer distance"; sixth, that it should be unlawful for a common carrier "to enter into any contract, agreement or combination with any other common carrier or carriers for the pooling of freights of different and competing railroads, or to divide between them the

aggregate or net proceeds"; seventh, that common carriers should not enter into agreements, by change of schedules or carriage in different cars or by other devices, to prevent the continuous carriage of freight. There are also provisions prescribing penalties for non-compliance with the requirements of the act.

The propositions that rates should be reasonable and just in themselves and that there should be no unjust or unreasonable discriminations between persons or places were already recognized in common law; as was also the "long and short haul clause," so far as it was an unjust or unreasonable discrimination between persons or places. The prohibition of pooling made such agreements unlawful for the first time as applied to interstate traffic, and was the only restrictive feature of the act which was self-operative. In order to make the act effective as a whole, its administration was provided for by the creation of a commission, whose powers and duties will be separately considered. In 1888 the act was amended to cover classification, which was not originally the case. In 1889 it was amended to provide for the proper publication of freight and passenger tariffs, also that published charges should not be advanced without ten days' notice nor decreased except on three days' notice; and that copies of all tariffs should be furnished to the Commission. Further amendments in 1889 and 1891 authorized the Commission to inquire into the manage-

ment of common carriers subject to the act, together with other provisions as to taking testimony, etc., intended to strengthen its powers in such matters. The act does not apply to the traffic of express companies, nor does it prohibit the pooling of passenger traffic.

After an experience of fifteen years in the working of the Interstate Commerce Act, an act known as the Elkins Law was passed in 1903. This act made no material change in the acts or things prohibited and declared to be unlawful, but changed the criminal remedies for illegal conduct and made the criminal provisions of the law more definite and positive. The penalties for discrimination were extended to cover corporations, as well as their agents, by abolition of the penalty of imprisonment and making both the corporation and the receiver of rebates subject to the imposition of fines. In cases of personal discrimination, instead of its being necessary to prove that some other person had been charged a higher rate on like contemporaneous shipments, it was made sufficient that a departure had been made from the published rate. An important provision in strengthening the remedies for unjust discrimination was that which conferred jurisdiction upon the United States Circuit Courts to restrain departures from published rates by writ of injunction.

The system of pooling had failed to secure popular approval because the maintenance of rates was undesirable to the interests that thrived on unrestricted

competition. As a fact, the restriction of competition does indirectly benefit that much greater number of persons whose rates are made by the grace of the corporation, since the higher the rates can be relatively maintained on competitive business, the less is the discrimination against local business. This fact was clear enough to the contract shippers and more particularly to the powerful interests which enjoyed special rates and secret rebates.

These interests stirred up animosity against the pooling system among those who really suffered from unrestricted competition but who, blinded by their prejudices, made their antipathy felt at the ballot-box. There was, however, some rational ground for this antipathy, for the system of regulating rates by internal control among the railroad corporations themselves was directed to the restriction of competition so as to increase their net earnings. The interest of the shippers who have not the advantage of competition is not the especial concern of the railroad managements, except to prevent their business from being included in the field of competition. The competitive shippers, the men whose business furnishes the through traffic, need no aid from any external source so long as competition for that business is unrestricted; but the men who furnish the local business have no champions except those whom they appoint through the medium of the laws. Through legislation they had triumphed over

the railroads, first in the State legislatures and now in Congress. In the prohibition of pooling agreements, Congress took a step in advance of common law principles. While the courts did not view such agreements with favor, so far as they might be in restraint of trade, and would not aid in their enforcement as contracts, they had never specifically pronounced them illegal. Some of the Western States had legislated against pools, and now this rule was applied in interstate traffic.

The railroad managements had either to dissolve their pooling associations or to remodel them in conformity with the law. The Trunk-line Association and the Southern Railroad and Steamship Association chose the latter alternative. They did away with money payments in equalizing the excess and deficit of tonnage as apportioned among their members, and sought to preserve the agreed division of traffic by the substitution of heavy fines for violations of the agreement. The lines west of Chicago dissolved their associations, and a disastrous rate war ensued which lasted for three years. Then they reorganized the Western Traffic Association as a federation of several minor associations, avowedly to carry out the provisions of the Interstate Commerce Act.

A test case was made against one of these minor associations, the Trans-Missouri Freight Association. The Circuit Court and the Circuit Court of Appeals decided that the association was not in contravention

of the Interstate Commerce Law and the case went up to the Supreme Court. There the ground of attack was based upon the Anti-trust Act of 1890. Counsel for the association maintained that the railroads were not amenable to its terms; that three years prior to its passage they had been placed specifically under the control of the Interstate Commerce Act, and that by its provisions the legal status of the association should be determined; that the intent of Congress to exclude railroad corporations from the provisions of the Anti-trust Law was shown by the defeat of an amendment to that law which provided that railroad corporations should be subject to its provisions. By a bare majority the Supreme Court decided that the railroad traffic associations were associations in restraint of trade under the terms of the Anti-trust Law; that it was not necessary to prove that they had committed any act in contravention of that law, but that it was sufficient that they had it in their power so to do if they wished; that the court concerns itself only with questions of law, and that, if Congress intended to relieve railroad corporations from the provisions of the Anti-trust Law, it could do so by appropriate legislation.

The Interstate Commerce Commission proceeded also against the Joint Executive Committee of the trunk lines, and, in 1898, the Supreme Court decided against that association. Its members voluntarily ceased to act conjointly in the maintenance of rates, though it

is not easy to understand how their rates on competitive business can be altered and avoid discrepancies, without some tacit understanding among them. In 1895 the Southern Railroad and Steamship Association had been reorganized as the Southern States Freight Association, with a reduced membership and without any formal restraint upon the freedom of action of its members. After the decision in the Trans-Missouri Freight Association case, this association was dissolved and was succeeded by the Southeastern Freight Association, "for the purposes of consultation and mutual advice—in fulfilling the purposes of the laws affecting commerce."

The managers of the railroad companies, the men who were responsible for the earnings from freight traffic, were now at the end of their rope. They could no longer combine even to agree upon rates; yet without a common understanding as to rates, not only was the solvency of the railroad corporations imperilled, but the business of the country was threatened with confusion. In the attempt to regulate rates by external control, the internal control over them had been made impotent, and no other instrumentality had been devised to replace it. Direct legislation to regulate rates had proved to be impracticable. The field of action of the several State commissions was too limited and the powers of the Interstate Commerce Commission, as interpreted by the courts, was inadequate. Congress might debate the proposition indefinitely, but what was to become

of the vast interests that in the meantime were drifting along into the turbulence that would follow when the forces of competition were freed from all restraint?

The managers of the railroads could not act, but the owners could and did, not through the medium of stockholders' meetings, but as individuals uniting for the protection of a common interest. It was a strange position in which they were placed, brought about, not by the features of the Interstate Commerce Act prohibiting unjust and unreasonable rates and discriminations, but by the single clause prohibiting pooling. If pooling had been legalized, the internal control of the railroad corporations over the regulation of rates could have been strengthened to carry out the fundamental provisions of the Act. Their property rights, however, still remained to them, and they resorted to a plan by which certain capitalists became sponsors for the maintenance of rates on the part of the corporations in which they respectively held controlling interests.

East of the Mississippi this plan was carried out by placing managing officials of each of their corporations in the directorates of certain of the others, but the lines from the Mississippi westward to the Pacific coast were not controlled in this way. These lines had been for some years joined in a rate-making bureau known as the Transcontinental Freight Association, until 1897, when it was dissolved and the California lines became separately associated as the Transcontinental Freight

Rate Committee. The Northern Pacific and the Great Northern companies found themselves at a disadvantage in competition for Atlantic coast business with their rivals from San Francisco, as they had no direct connection either with the Gulf of Mexico or with the trunk lines at Chicago. The financial interests which controlled the competing lines between St. Paul and Puget Sound combined and secured an independent entrance into Chicago by one of the boldest strokes of financial generalship that railroad competition has ever successfully accomplished. This was nothing less than the acquisition on joint account of the whole 8000 miles of the Chicago, Burlington, and Quincy system.

This system was prosperous enough in itself to be a profitable purchase at any reasonable price; but the price that was paid for 97 per cent of its stock, over \$107,000,000, was in joint collateral trust bonds of the two corporations to double that amount. This grand *coup* alarmed the Vanderbilt interests controlling the Chicago and Northwestern Railroad Company and the affiliated interests in control of the Union Pacific Railroad Company, and they engineered a counter-stroke, to purchase the majority of the common stock of the Northern Pacific Company.

The Great Northern people detected the source of the buying of Northern Pacific stock and themselves went into the market. The speculators caught on to

the scheme, helped the contest along, and carried the price of the stock up from 58 to 300. The speculative mania became epidemic, and the price touched 1000, when the bubble burst on May 9, 1901. Then, while the bulls and the bears were wrangling over the remnants of the lambs, the lions of the railroad world tempered their anger with judgment and sought a compromise of their conflicting claims to the control of the Northern Pacific Company. This was effected by representation in its directorate of the several interests of the Union Pacific, the Chicago and Northwestern, the Chicago, Milwaukee and St. Paul, and the Great Northern companies, with an official of the Pennsylvania Company as a sort of umpire.

This was the preliminary step to a more permanent combination, in the formation, under the laws of New Jersey, of the Northern Securities Company, as the controlling organization of both the Great Northern and the Northern Pacific companies, controlling 24,000 miles of road, with a capital of \$400,000,000, and guaranteeing over \$600,000,000 of securities of its subsidiary corporations. The financial interests concerned in this company themselves controlled about 90,000 miles of road, so that, directly and indirectly, about one-half of the total mileage of the country was brought under one community of interest.

Such had been the outcome, not of the Interstate Commerce Law as a whole, but of the clause prohibit-

ing pooling. But the end was not yet. The Northern Securities Company now became the object of prosecution in the federal courts in a case which was finally decided by the Supreme Court on March 14, 1904. The financiers had relied upon the power of a State to create a corporation for the purpose of holding stock in other corporations, as being beyond the power of federal authority to regulate or supervise. But the Supreme Court, by a bare majority, as in the Trans-Missouri case, held that Congress in the Anti-trust Law had forbidden just that very thing, when the purpose was to destroy competition in restraint of trade. However, the basis of the decisions in the Trans-Missouri case and also in the Joint Traffic Association case was undermined in the decision in this case.

In these cases it had been decided that the language of the Anti-trust Law forbade all restraints of trade, whether reasonable or unreasonable, at common law, but in the Northern Securities case one justice, who was a party to the majority decision in all three cases, now reversed himself in a written opinion, in which he held that the holding of the stock of the Great Northern and the Northern Pacific companies by the Northern Securities Company was only unlawful because it was an *unreasonable* restraint of trade. The decree did not affect the corporate existence of the Northern Securities Company, but only its holding the stock of competing railroad companies, and the opposing inter-

ests in the Securities Company have until recently been litigating over the manner in which its assets should be distributed.

The able and powerful financiers who have been seeking to preserve the corporate powers of the great railroad companies, though driven from one stronghold after another, grow wiser by experience, and, relying upon their ultimate property rights, are now bending their energies to the combination of all the important competing lines of the country in one community of interests. This can the more readily be accomplished since, by a continuous process of integration, the really important lines are now practically controlled in but eight interests, and with the regulation of rates over each system in the hands of a single traffic manager, the evil effects of competition upon net earnings may be neutralized without further combinations in restraint of trade.

After twenty years of political agitation, the railroad problem has become concentrated and clarified. To that extent it has been brought nearer solution. The preponderance of interstate commerce over that within each State has diverted attention from State legislation. The people now look to Congress alone for action. All other projects for Congressional legislation have become obscured since the lime-lights have been turned upon that of the regulation of rates on interstate commerce by the intervention of the Interstate Commerce Commission.

CHAPTER IX

STATE RAILROAD COMMISSIONS

THE futility of endeavoring to regulate railway operations in the public interest by direct legislation was made manifest in England in the earliest period of this novel mode of transportation. Neither the benefits nor the abuses associated with its development could be foreseen; consequently neither the proper aids to its encouragement nor the proper remedies for the ills which it originated could have been anticipated in statutes. The only safe course under such conditions was to be directed by the principles of common law, as applied by wise judges to the particular cases which were presented for adjudication, as railway corporations came in conflict with private interests or with the public welfare. The courts closely adhered to the analogy of railway corporations to common carriers by highway. To the extent that this was an analogy, and not a semblance, their decisions and opinions were valuable in the defence of corporate rights, as well as in setting limits to corporate powers. But with the extension of the railway system, and with its marvellous development as a novel mode of transportation, the

affinity of the railway to the highway became lessened. As this became more remote, the analogy between them became less real, and of less practical value as applicable to the regulation of the relations of the railway to the State, or to the persons whom it served.

Parliament recognized that the regulation of these relations could not be satisfactorily attained by direct legislation, but had not yet looked upon it as a proper field for the exercise of delegated powers by an administrative bureau; so the statutory provisions on the subject were modified by making it the business of the judiciary not only to interpret them as applicable to cases, but also as to current circumstances and conditions. But courts cling so strongly to precedents that they are shy of ruling on uncertainties, and they would not depart from their accustomed methods in the regulation of railway affairs.

The next experiment in railway regulation was taken in 1840 by giving a sort of advisory power to an existing bureau, the Board of Trade; but that bureau had other duties to perform of a different character, and made no impression on the railway situation. In 1844 a special railway commission was created with specific powers, among them to report to Parliament upon applications for charters. This power did not accord with the interests of either promoters or practitioners before parliamentary committees, and the commission was soon abolished. In 1846 another plan was tried by the

appointment of a commission of well-known men at high pay, but with powers so prescribed that it accomplished nothing. These repeated failures resulted in an abandonment of the commission idea, and there was a return to direct legislation in the "Railway and Canals Traffic Act" of 1854. It was again found that restrictive railway legislation cannot be made self-operative nor applicable through the courts otherwise than to particular cases. After eighteen years of this experience it was determined to create a bureau specially charged with the enforcement of the provisions of the Act of 1854, and the commission thus appointed bore a similar relation to that act as does our Interstate Commerce Commission to the Act to regulate Commerce of 1887.

This commission, as President Hadley says, was given just enough power to annoy the railway companies and not enough to serve the public efficiently. It was a *kind* of a court rather than an administrative bureau, and could require a company on complaint to furnish proper facilities, or to cease giving undue preferences. Though under the act which created the commission its decisions were to be final, they were carried by writs of mandamus to the courts of appeal, where the commission was required to *state a case* and then the whole matter was retried *de novo*. Every case was appealed, with consequent delay and expense. Although the courts ordinarily enforced the orders of the commission,

the railway appellant would only apply them to the particular station or case named in the complaint; so that in other cases involving the same principles a new complaint had to be made and retried in the court of appeals. Eventually the courts found their way to a decision which sufficiently sustained the powers of the commission in this respect, and the railways conformed to its orders as a general thing. In 1888 the commission was reorganized with enlarged powers. Two of its members were railway experts, and a judge of a superior court was appointed as an *ex-officio* commissioner in England, Scotland, and Ireland, respectively, to sit as an assessor in the hearing of complaints in each of those countries. Its decisions as to facts are final, and its orders are to be observed until set aside by a court of appeals.

In the United States, the gradual shifting of the seat of railway regulation has proceeded on parallel lines with British experience, varied, however, by the different political conditions due to our form of federal government under written constitutions. The notion of regulation by an administrative bureau appears at a very early date. In Rhode Island, in 1836, the legislature passed an act entitled "An Act to establish Railroad Commissioners." The board was given power to examine into the proceedings of any railroad company in the State, to secure to all inhabitants of the State full and equal privileges for the transportation of per-

sons and property, at all times, that may be granted by the same company to the citizens of any other State, and ratably in proportion to the distance any such persons or property might be transported on any railroad, also to inquire into any contract or understanding by which any railroad company might attempt to give any favor or preference to any one company or boat over others as to freight or passenger traffic contrary to the intent of any acts in relation to railroads. This legislation appears to have been induced by a determination to prevent the restricted area within the borders of the State from being used as the mere foundation for highways between the neighboring States. The Rhode Island Commission seems to have died of inanition, and we hear but little more of the intervention of an administrative agency in the legislative regulation of railroad operations. In fact, the necessity for such an agency was not made apparent until the extension of our railroad system had given rise to discriminations under which the people grew restive.

The first important effort at regulation of this character was taken in Massachusetts in 1869. At first its powers were altogether advisory, but they have been gradually extended so that it exercises a general supervision over the incorporation, financing, construction, and operations of railroads in general. Its investigations form the basis of an annual report to the General Court as to the actual workings of the railroads in their

bearing upon the prosperity and business of the State. These investigations may also lead to notice being served on any railroad corporation which it deems to have violated the laws, and, if such notice be disregarded, the fact is brought to the attention of the attorney general for such proceedings thereon as he may deem expedient.

This advisory, or rather supervisory, type of a railroad commission has commended itself to the legislatures of several other States. It seems to be more acceptable in those States in which the stocks and bonds of the domestic corporations are largely held by their own citizens, who accordingly are interested in influencing legislation in which their property rights shall be fairly recognized. A different policy prevailed in those States in which violent prejudices had been induced against the managements of railroad companies whose stockholders and bondholders exercised but little influence at the ballot-box. In such States resort was had to legislation in which the principle of even-handed justice was replaced by that of *force majeure*, exerted through commissions in which railroad experience was regarded as a disqualification for membership, with powers that were officially pronounced by a commission of this type as "positive, not merely negative, which, like thumb-screws, take a powerful hold, so that even litigation to test them is dangerous." Such commissions were created, not as tribunals to deal impartially with the railroad corporations, but as tribunes of the

people, to stand before them with sword and shield, to do battle in the public defence against abusive exactions.

Where the traffic thus subjected to commissions of this type was of importance, it was to be expected that their great power would be so exercised as to result disastrously to the interests over which they had irresponsible control, and that the railroad corporations would resist them to the last extremity. In doing this, the latter aroused public indignation at what was considered as defiance to the laws in testing the authority of the commissions over the management of railroad property. In some instances this power was exerted in such a way as to react injuriously upon the people themselves; in other instances it was restricted by the courts. Increasing experience also served to temper the exercise of power which often inflicted injury rather from ignorance than by intention. In course of time the railroad managers assumed a less resentful attitude toward the State commissions, and instead of standing aloof from them, took some pains to enlighten them as to the probable effect of their intended rulings. Popular antagonism to the fair treatment of railroads abated as the people felt that their interests were being protected by their own representatives against the manipulation of rates in the railroad interests. This modification of sentiment has been reflected in the legislation by which railroad commissions were successively established in different States.

A recent commission of the rate-making type was

created in Virginia after the adoption of a new constitution in July, 1902. The article on corporations is in fourteen sections, beginning with definitions of such terms as "corporation" or "company," "charter," "transportation company," "rate," "transmission company," that is, telegraph and telephone lines, etc. Corporations of any kind can only be created under general laws through the medium of a corporation commission, which has all the powers of a court of record. It is the department of government specially charged with the issue or refusal of certificates of incorporation to railroad, telegraph, banking, insurance, or industrial companies, as well as to associations of Confederate Veterans and social clubs. It has full supervision of public service corporations, and of their rates and regulations. It is interesting to note the character of the provisions intended to avoid the points in which the Interstate Commerce Act was thought to be inefficient. Issues as to the merging of legislative and judicial powers in the commission thus created were precluded by a provision, "Except as hereinafter provided, the legislative, executive and judiciary powers shall be separate and distinct." Litigation in the federal courts was forbidden by a declaration that the provisions of this article shall be so restricted in their application as not to conflict with the federal Constitution, "as if the necessary limitations upon their interpretation had been herein expressed in each case."

The commission is in reality a court of first instance, endowed with full supervisory and inquisitorial powers over transportation and transmission companies and private car lines doing business under State charters, and over similar foreign corporations doing business within the State, for which purposes the commission issues licenses to them. As a court of record, it has power to administer oaths, to compel attendance of witnesses, and to inflict fines. The authority of the commission to prescribe rates to transportation and to transmission companies is paramount, subject to appeal to the Supreme Court of Appeals, as from other courts of inferior jurisdiction. In no such case of appeal shall any new or additional evidence be introduced, but the commission shall certify to the court all facts upon which its action in the case was based and which may be essential for a proper decision, together with such evidence as may be selected from that introduced before the commission by any party in interest. The commission must also file a statement of the reasons for its action, which must be read and considered by the court. The court shall have jurisdiction to consider and determine the reasonableness and justice of the action of the commission and any other matter arising under the appeal, provided, however, that the action of the commission shall be regarded as *prima facie* just, reasonable, and correct. The court may remand any case for further investigation, to be reported upon before final decision. Upon

granting an appeal, a writ of *supersedeas* may be awarded, suspending the operation of the act appealed from until the final disposition of the appeal, upon the execution of a suspending bond approved by the commission or approved on review by the court, payable to the commonwealth, sufficient to insure refunding to persons entitled thereto all charges collected pending the appeal in excess of those finally authorized. All such appeals are to have precedence next after the *habeas corpus* and Commonwealth's cases.

In its first report, for the year 1903, the commission includes a list of 540 charters and amendments granted to corporations, but it had disposed of no matters of importance during the year concerning transportation companies; except that, under an act relating to car demurrage, it had issued a general order prescribing regulations and charges for storage, demurrage, and car service or detention.

The creation of the Interstate Commerce Commission by the act of 1887 constituted a decided step in advance in the government regulation of railroad operations. It was not a measure hastily devised in the fervor of popular indignation. Congress had no old scores to pay off against bloated bondholders, no local jealousies of railroad magnates to gratify. The matter of the regulation of interstate traffic had been under investigation by congressional committees for ten years before the passage of the Act to regulate Commerce, and the

provisions of that act may be considered as fairly representative of the average view taken by thoughtful and well-informed legislators as to the proper mode of railroad regulation under the light of experience.

It is interesting to note the apparent effect of the Interstate Commerce Act upon the alleged abuses in interstate traffic, and of the remedies which it provided for them. As has been previously mentioned, it declared agreements for the pooling of freights of competing railroads to be unlawful, as also the division of their earnings. The railroad managements substituted fines for money pools, but continued the physical division of traffic until it was declared to be unlawful by the courts, not under the provisions of the Act to regulate Commerce, but under those of the Anti-trust Act, as applied to all agreements in restraint of trade. The provisions of the Interstate Commerce Act, as amended in 1889, are explicit as to publicity, yet they are of little use in keeping the public fully informed as to the legitimate charges on particular shipments. The schedules of rates and classifications, terminal charges, and regulations affecting any of these are to be posted conspicuously in two places in every station and office where passengers or freight are received for transportation, and copies of all these are to be filed with the Commission for its information. In the year 1903 there were thus received 165,000 tariffs and 263,000 notices of concurrence in joint rates, and there were then over

2,000,000 tariffs on file. When we think of this multitude of papers, of the thousands of changes continually taking place in them, and of the many recondite conditions involved in the regulations concerning them, we can comprehend that, however well intended this provision of the act may be, no person would trust to his own examination of a published tariff to ascertain anything as to freight rates or fares, even from one local station to another. A large corps of expert clerks is required in the office of the Commission to file and index the rate sheets that come in daily by hundreds; and unless they become familiar with the multiplicity of details that affect the divisions of each joint rate as well as any changes in its total, even they can accomplish but little either in the way of criticism or of practical suggestions as to the modification in the public interest of this multitude of rates.

We may say that, as to the determination of the reasonableness *per se* of the general freight tariffs of the country, nothing has been accomplished under the act of definite practical value, except in the publication of statistics. From these we learn that our average freight rates are lower than elsewhere in the world, and that, under their general application, the business of the country has prospered phenomenally. Whether this is a matter of *post hoc* or *propter hoc* does not materially affect the reasonableness of our rates in general. In view of the uncertainty which accompanies any attempt

to apply generalizations on this subject to practical purposes, legislation intended to formally place the general rate-making of our railroad system in the hands of the Interstate Commerce Commission is the most vital issue involved in the present agitation for the amendment of the Act to regulate Commerce.

In the matter of personal discrimination, distinctly prohibited by the act, if there has been a single conviction under its provisions, I am not aware of it. Yet such abuses are believed to have been greatly diminished of late, indirectly, perhaps, from their having been made odious as crimes, and through the additional means afforded for their punishment by the passage, in 1903, of the so-called Elkins Law. More directly, however, the prevalence of illicit discrimination has been restricted as the points of artificial competition have disappeared in the process of railroad consolidation. Obnoxious as personal discrimination assuredly is to the business of individuals, it has not the lasting and far-reaching effects upon the public welfare that is caused by discrimination between interests of production and distribution in different localities and regions. Discriminations of this character are pronounced in Section 4 of the act to be unjust and unreasonable unless warranted by dissimilarity of circumstances and conditions. The "long and short haul clause" is the only feature of the act that directly affects rate-making. It had a basis in the demand for joint rates, and coöp-

erated with the consolidation of trunk-line routes under rival managements in securing a proper relation between the New York-Chicago rates and those between the same termini and intermediate junction points. Around this "long and short haul clause" has converged the principal activity of the Commission and the opposition of the railroad managements. Neither the methods of interpretation followed by the Commission nor its resulting orders were accepted by them. The circumstances and conditions varied in each case of complaint, and as no common measure of similarity and dissimilarity was recognized by both parties, the proper standard was largely a matter of opinion. As in all issues involving a difference of opinion, the controversy became very bitter, and was vigorously contested in the courts. Their decisions, when finally rendered, were unsatisfactory to both litigants. The ultimate cause of the indeterminate character of these decisions is in the section of the act which relates to discrimination between shipments for different distances, and which is really intended to preserve competition where it is reasonable and to prohibit it where it is unreasonable. This is confessedly a difficult matter to define with legal accuracy in legislation, and Congress provided for it in terms so indefinite that the courts have not helped to make the "long and short haul clause" much clearer in its practical application in the hearing of complaints by the Commission.

Not only was it found difficult to draw the line in each case between the circumstances and conditions that made lower rates on competitive business legal or illegal, but the situation was still more embarrassed by the contention as to the claim of the railroad managements to determine in the first instance what constituted dissimilarity in such cases. Yet Section 4 distinctly provides that, upon application of the carriers, in special cases the Commission may upon investigation prescribe the extent to which the applicant may be relieved from the operation of the said section. This proviso is open to the interpretation that it is merely permissive; that it is a protection to the carrier who avails himself of it, while he who does not must take the consequences of his independent action. The manner of the application of this section to competitive business, therefore, brought up the method which the Commission should adopt in prescribing the extent of relief from its provisions, and this involved the character and extent of the powers of the Commission in regulating the making of rates on competitive business. The contest in the courts was joined on these two points, as to the claim of the railroad managements to determine primarily what constituted the circumstances and conditions under which discrimination in rate-making was justifiable, and as to the character of the functions exercised by the Commission in passing upon such rate-making.

The determination of these issues not only affected

the welfare of adjacent localities, but also the claims of centres of distribution in the Middle West to compete with those of the North Atlantic seaboard in the markets of the Southern States and of the Pacific slope, and also the claims of domestic areas of production and centres of distribution in general for protection against the intrusion of those of the Old World in our home markets; so far-reaching and pervasive is the effect of railroad discrimination upon the spirit of commercial competition. The ultimate construction put by the Supreme Court upon the meaning of the third and fourth sections of the Interstate Commerce Act is thus interpreted by the Commission, "that where actual competition exists at the more distant point which does not obtain at the intermediate or nearer point, and where such competition has actually produced a lower rate at the more distant point which the carrier cannot control and must meet to obtain a share of the business, these sections do not prohibit the disparity in rates, so long as the low competitive rate is remunerative to the carrier and the non-competitive rate is reasonable in itself." This being the final conclusion of the Supreme Court, it is binding upon the Commission, and, as the Commission observes, "if such ruling by the court is not adequate to the proper correction of transportation abuses, the remedy lies in an amendment of the act itself."

In passing upon the "long and short haul clause" in the Louisville and Nashville Railroad case, the Su-

preme Court had recognized the right of the carrier to take into consideration the existence of competition, provided that all the rates affected by its action were just and reasonable in themselves. The Commission very truly says that it is often difficult to say what constitutes a reasonable rate, and that when it attempted to apply the rules laid down by the court as a test of reasonableness, the railroad officers asserted that it would be impracticable to be governed by them. The Supreme Court, in the same case, laid down another principle, "that the competition relied upon be not artificial or merely conjectural, but material and substantial." This seems to be a clearly defined proposition, capable of practical application as a standard for determining dissimilarity of circumstances, and as such it marks a decided advance in clearing away the obscurity in the language of the Interstate Commerce Law relating to this matter.

It probes the wounds inflicted by the establishment of competitive centres at junction points upon the prosperity of near-by stations, and demonstrates the practicability of a remedy for the ills of this character. Such a remedy is contemplated in the proviso which permits the Commission, in special cases, to prescribe the extent to which the carrier may be relieved from the operation of the "long and short haul clause." If this proviso were amplified to permit the continuance of the "basing point" system of rate-making where it is already in

force, except where the Commission on complaint should specifically order against it, as in the Social Circle case, but at the same time prohibited the extension of this rate-making system to other points, unless authorized by the Commission, abuses in this respect might be gradually cured without sudden disturbance of long-established commercial relations.

The Interstate Commerce Law was intended to regulate interstate commerce in two respects: first, as to exorbitant rates in general; secondly, as to discriminations between persons and localities. Indirectly, the potency of competition as a regulating principle in the public interest was sought to be preserved by the prohibition of pooling. That provision was self-operative, and we have already considered its effects. The provisions as to exactions and discriminations were to be enforced through a bureau independent of any of the administrative departments. It seems to have been the intention of Congress to endow the Interstate Commerce Commission with powers somewhat more extensive than those possessed by the supervisory type of commissions, like that of Massachusetts, and not so broad as were exercised by the extreme rate-making type favored in the Western and Southern States. We have now to consider the character and extent of its powers and functions as interpreted by the Interstate Commerce Commission and as determined by the courts.

As originally organized, the Commission included in

its membership jurists of national repute, whose opinions carried authority and whose views were conservative. For these reasons, and because the whole situation was tentative and uncertain, the railroad managements were inclined to respect their decisions. But as these decisions began to press harder upon them and to limit their freedom of action, they became restive and flatly disregarded the orders of the Commission. As a natural consequence, the Commission concerned itself more and more with strengthening its powers, and its hearings assumed less and less the character of a judicial tribunal. Its rulings were necessarily based on *ex parte* evidence, as the railroad counsel appeared there rather as critics than as representing defendants. They tested the potency of its orders in the courts, and reserved for such tribunals both their evidence and their arguments. In the treatment of these cases, the courts appeared at first to be doubtful as to the standing of the Commission, but eventually were disposed to strengthen its powers for the investigation of complaints and the finding of facts, while reserving to themselves entire freedom to determine the legality of its orders based thereon. The Commission became as restive under this restriction of its prerogatives as the railroad managements had been under its exercise of authority over them. It has appealed from the Supreme Court to the sovereign people through the public press, in popular assemblages, and before congressional committees, and has recently

received the almost invincible support of the President of the United States. It has by these means succeeded in exciting such an interest in its behalf that the current discussion of the regulation of railroad rates has become concentrated on this one point — of the extension of the authority of the Commission by the limitation of the power of the Supreme Court over the enforcement of its decisions.

This statement is not made with any intention of minimizing the advisability of regulating, through the medium of a commission, the services performed by railroads for the public, still less to detract from the value to the public of the services already rendered by the Interstate Commerce Commission. Its eighteen annual reports afford ample testimony as to the intelligent and thorough consideration given by the Commission to the investigation of abuses and to the suggestion of appropriate remedies; while the statistical information which they furnish is invaluable in the discussion of any of the multiform problems of railroad operations. But it would seem that the friction between the Commission and the railroad counsel, in the courts, has engendered an ardor in the discussion of the several measures proposed for the better regulation of interstate commerce that is diverting attention to these issues from those in which the public welfare is more pertinently involved.

Reference has already been made in this chapter to

the dissatisfaction exhibited by the Commission with the limitations placed by the courts upon its power to enforce its orders. In its eighteenth annual report, for 1904, the Commission makes the statement that under these limitations, while it may find that a rate complained of is unreasonable and may order the carrier to desist from charging that rate, it cannot order a reasonable rate to be substituted for it; that a nominal reduction of the charge frees the carrier from further obligation under the order; that it can merely condemn the wrong, without being permitted to prescribe a remedy. In fact, as thus limited, the Commission has no power to fix a standard for reparation to those who have suffered from the application of the rate adjudged unreasonable, nor for the protection of those to whom the same rate may be thereafter applied.

If this be really the effect of the judicial limitation of its powers, the Commission is apparently reduced to the state of impotency to which it has resigned itself. Its functions have been restricted to preparing cases against the railroad companies for trial before the federal courts, to detecting and prosecuting violations of the Safety Appliance Act, to publishing statistical information, and to filing rate sheets. It is maintained that to deprive the Commission of the power to fix definite standards of reasonable rates, results in the virtual denial of a prompt remedy to those who have suffered in the particular cases complained of, but this suffering is but a

small matter compared with the far greater injury wrought upon the public generally by the continued application of a rate which is in truth unreasonable through the period of years which may elapse before a final decree is obtained. This aspect of the present situation has aroused popular opposition to the suspension of the Commission's orders during the pendency of an appeal from them.

The railroad companies naturally enlarge upon the undoubtedly injurious effects upon their revenues if a rate reduced by the Commission, which should ultimately prove to have been reasonable, had been in the meanwhile applied to any considerable part of their traffic; also they claim that, with the application of the lower rate in any one case, the exigencies of rate-making compel reductions on other traffic, so that, even with a final decision in their favor, the commercial relations over a large territory will have become readjusted to a lower basis of rates, which it will be impracticable to replace upon its former reasonable plane of remunerative returns. Opposition also comes from business interests in which serious disturbance is apprehended from the sudden readjustment by the Commission of the relations which at present exist between great areas of production and centres of distribution.

In the complaint of the Freight Bureaus of Cincinnati and Chicago against the whole Southern railroad system, the Commission took exception to the existing adjust-

ment of rates as between merchants shipping the same commodities from the North Atlantic seaboard and from the Middle West into Southern territory. After long and disastrous rate wars, the railroad companies respectively interested with each region of shipment had arrived at a compromise which had been in effect for years, and to which the commercial relations of the whole South Atlantic region had conformed. Following upon a careful investigation, the Commission prepared complete schedules of maximum classified rates to be applied respectively on business from Cincinnati and Chicago to some eight or ten principal cities in the Southern States. Without questioning the correctness of the judgment of the Commission as to what was the definitely just and reasonable balance of competing rates between shippers from the Middle West and from the North Atlantic seaboard to common points in the South, undoubtedly the disturbance of the existing balance would have greatly diminished the existing volume of traffic from the Eastern cities, and would have led to conflicts of competing rates that might have been as disastrous to merchants as to railroads. This would, therefore, seem to have been a case in which the courts might well have directed a suspension of the Commission's order pending final adjudication, for the people of the South were not interested in the result. They were not to get any cheaper goods, but the Western merchants were to get a certain trade which the Eastern

merchants were enjoying; and if the order should have been finally disapproved by the courts, then, had it been all the time in force, all the lines from the East into the South would have lost a traffic and a revenue to which they were justly entitled.

Even farther reaching effects of such orders might be cited in cases like those which involved the making of rates on export grain and on imports into the interior, also those relating to rates to the Pacific slope from the Eastern seaboard and from cities in the Middle West. Whether in all these instances it would be better to let the long-established bases of important commercial relations remain undisturbed until the relative justice and reasonableness of the existing order of things and of the proposed disturbance of it had been determined in the courts of final resort, is in itself a most important matter, which should be clearly determined by appropriate legislation.

But legislation regulating the effect of an appeal from the orders of the Commission would not reach the central point of discussion, which is this: whether the Commission, in deciding that a rate is unreasonable, shall definitely fix the reasonable rate; for this the Supreme Court has decided to be beyond its powers as set forth in the Interstate Commerce Act. The Commission has neither claimed the power to establish a general tariff of rates, nor suggested that it would be necessary to confer such power upon it in the public interest; but

it claims that, after full investigation of a complaint during which all affected interests have had the opportunity to be heard, the order issued by the Commission under such procedure should by order of law become effective upon a specified date, unless its operation shall have been in the meantime enjoined by suitable proceedings in the federal courts.

The changes that are taking place in the relative importance of the several abuses sought to be cured by the Interstate Commerce Act may be inferred from the successive reports of the Commission. The instances of personal discrimination are disappearing. The Commission has expressed the opinion that secret rebates are well-nigh obsolete. The violations of the "long and short haul clause" at competitive junction points are decreasing with consolidation. The principal complaints of this character refer to discriminations between interests at primary centres of production and distribution competing for markets common to both; or between merchants engaged in foreign and domestic commerce, which induce issues affecting the very foundation of existing business relations throughout the country.

The most recent report of the Interstate Commerce Commission, for 1904, gives a total of 62 formal complaints received during the year, of which but 11 were of sufficient importance to call for a serious investigation. These related to such subjects as switching

charges, private car lines, division of joint freight rates, bills of lading, differential rates at North Atlantic ports, and alleged discriminating practices in connection with rates on boots and shoes, cattle, coal, and grain. These are matters of general concern to the public, and are deserving of the careful consideration given them by the Commission. But, on the whole, this showing does not really give a just notion of the valuable public service that the Commission renders outside of the hearing of formal complaints. It is active in other matters concerning railroad operations, as in the preparation and publication of statistical information and in the supervision of railroad companies in the application of the Safety Appliances Act.

From the time of its creation in 1887 up to June 30, 1903, 2798 informal complaints had been submitted to the Commission, mostly claims for overcharge, loss, or damage, which were forwarded to the claim departments of the railroad companies for adjustment. There had also been docketed 727 complaints of a more serious character. On June 30, 1903, there were still pending 30 civil cases in the courts. Fifteen of these were proceedings to enjoin departures from published rates, apparently in connection with three complaints. Three were petitions for mandamus to compel filing of annual reports, one contempt case, and two under the Safety Appliances Act. The only civil cases pending at that date with direct reference to violations of the Interstate

Commerce Act were four under the "long and short haul clause," two to prohibit unreasonable rates, and one to prohibit discriminating rates. Indictments had been found or were pending in three criminal cases, one for failure to file tariffs, and two for pooling cotton traffic.

CHAPTER X

PENDING LEGISLATION AFFECTING INTERSTATE COMMERCE

IN 1889 and 1891 the Interstate Commerce Act had been amended to strengthen the powers of the Commission to compel attendance of witnesses and the production of documents at the hearing of complaints. This provision was further amended in 1895 to protect witnesses from the penal consequences of their own incriminating testimony and to punish recalcitrant witnesses by maximum penalties of \$5000 fine and one year's imprisonment.

In considering the adequacy of the act, as it then stood, and of appropriate amendments to increase its efficiency, the report of the United States Industrial Commission is of great value. This report was made in 1902, prior to the passage of the Elkins Law and also to the decision of the Supreme Court in the Northern Securities Case. The Commission recommended:

I. Filing and publishing rates; sixty days' prior notice should be given of contemplated changes, subject to modification by consent of the Commission; and publication should be made as to all privileges and

facilities, including storage and free delivery; also all pertinent regulations should be duly set forth.

II. Cumulative penalties for departures from published rates and for refusal to obey final administrative orders of the Commission.

III. Long and short haul clause to be rigidly enforced, unless relieved by order of the Commission prescribing the extent of the departure under the limitations of the Interstate Commerce Act.

IV. Definite grant of power to the Commission to pass on the reasonableness of freight and passenger rates, to declare any rate unreasonable, with power to prescribe reasonable rates in substitution.

V. Early hearings on complaints with limit of thirty days for appeal to the Circuit Court. Such appeal not to vacate or suspend an administrative order, unless it plainly appeared that the order proceeded upon some error of law or was unjust or unreasonable on the facts. All findings of facts by the Commission to be received as *prima facie* evidence. New testimony, if material and could not have been taken in the first instance, to be taken by the Commission. Thirty days' limit for appeal to the Supreme Court, not to vacate or suspend the order.

VI. Specific power to the Commission as to specific classification, but not to promulgate a uniform classification.

VII. A permanent corps of auditors to examine

railroad accounts for the detection of violations of law and for statistical returns. Information thus obtained to be confidential, as in the inspection of national banks.

VIII. The Commission to be increased to seven members, representing the various interests concerned.

IX. Legislation analogous to stock-watering statutes of Massachusetts. New railroad construction to be regulated so as to prevent unwise paralleling of existing lines.

X. Prohibition of lower rates on imports billed to interior points in connection with ocean transportation, than on similar articles from the seaboard.

In 1903 the Interstate Commerce Act was still further amended by the passage of "An Act to further regulate Commerce with Foreign Countries and among the States," commonly known as the Elkins Law; also by "An Act to expedite the Hearing and Determination of Suits in Equity, etc.," that were brought under the Interstate Commerce Act or the Anti-trust Law.

The changes wrought in the Interstate Commerce Law by the Elkins Law are succinctly stated by the Interstate Commerce Commission as follows:—

I. The carrier is made criminally liable where the individual was before.

II. A wilful failure to publish tariffs punished by a maximum fine of \$20,000, as also the offering, solicit-

ing, or accepting of any rebate, concession, or discrimination, amounting to a lower rate than published. The inclusion of a discrimination in this connection is considered an important change.

III. All penalties of imprisonment repealed.

IV. Shipper as well as carrier included in proceedings before the Commission.

V. Circuit Courts are given power to interfere by summary process to prevent departures from published tariffs and to prevent other forbidden discriminations. There is no material change in the things prohibited, but the penalties are changed and the criminal provisions made more definite and punitive.

The most recent views as to amendments of the Interstate Commerce Act were educed at the hearings before the House Committee on Interstate and Foreign Commerce, in December and January last. Representatives of a national organization composed of over four hundred commercial associations were present. This organization included only mercantile interests, and its representatives were there to influence legislation avowedly in behalf of those interests. In 1899 they had secured the support of the Interstate Commerce Commission, in a published order, to the passage of a certain bill to amend the Interstate Commerce Act and by instructions to the secretary of the Commission to devote himself assiduously to the distribution of documents designed to give public

information on this subject. This measure, entitled "A Bill further to define the Duties and Powers of the Interstate Commerce Commission," was introduced in both the Senate and the House of Representatives in December, 1903, and is known as the Cooper-Quarles Bill.

The bill provides that any order of the Commission declaring any rate, regulation, or practice to be unjustly discriminative or unreasonable, and declaring what rate or regulation would be just and reasonable and requiring the same to be substituted therefor, shall have operation within thirty days or, in case of proceedings for review, within sixty days after notice. If the rate be a joint rate and the parties thereto fail to agree as to its division between them, the Commission shall determine the matter. When the Commission prescribes "the just relation of rates to or from common points," and the parties interested fail to agree as to the changes to be made to effect compliance therewith, the Commission may prescribe "the rate to be charged to or from such common points."

Every such order is to be reviewable by the Circuit Courts by petition in equity filed within twenty days after service of the order. The court may cause additional testimony to be taken, and, if it shall be of the opinion that the order was made in error of law or is upon the facts unjust or unreasonable, it may modify or annul such order, otherwise the petition shall be

denied. Pending such review, if in its opinion the order is "clearly unlawful or erroneous," the court may suspend it. Appeal may be made to the Supreme Court within thirty days after the rendition of the final decree, but neither the order of the court nor the execution of any process shall be suspended during the pendency of the appeal. Such cases, in both courts, are to have precedence over all except criminal cases. If any party refuse to obey an order of the Commission, the same shall be summarily enforced by proper process, and the offending party shall be subjected to \$5000 fine for each day of the continuance of such refusal.

The provisions of this bill may be presumed to embody the views of the Commission as to the legislation necessary to secure the efficient operation of the Interstate Commerce Act, and to these provisions the statements made at the hearing before the committee in a great measure referred. Its advocates were opposed to pooling associations, but admitted that they had been unable to detect any violation of the prohibition against individual discrimination. The main purpose of the Cooper-Quarles Bill, as developed at the hearing, was to make sure that the powers of the Commission were adequate, not only to declare a rate or rates unjust and unreasonable, but also to determine what rate would be just and reasonable and to enforce the substitution of the one rate for the

other. The intention was to apply this power to the evils of discrimination between localities and between commodities, in the interest of dissatisfied mercantile interests, representing, as was stated, about one-fiftieth of the public. It was shown that the merchants at the distributing centres were the sufferers by unreasonable discrimination; the consumers being only sufferers when the rates were unreasonable *per se*. Discrimination between competing areas of production over separate roads does not come within the definitions of the "long and short haul clause" and has not been reached by any of the proposed amendments.

The embarrassment which is expressed in the efforts at giving to the Commission the power that its members deem necessary for the public protection against unreasonable discrimination is caused by the unwillingness of the courts to find in the law creating the Commission any power for it to do more than to pronounce an existing rate unreasonable and to require the offending carrier to desist from applying it to cases of the character referred to in the Commission's order. The court itself will not undertake to define what should have been a reasonable rate under the circumstances, and it declines to make rates for the future, which it asserts to be a legislative and not a judicial function. The objection is made to this decision that the Commission can only order a carrier to desist from charg-

ing a certain rate and require that the rate shall be made lower, and that the carrier may nominally conform to such an order by a trifling reduction in the rate, though no important examples were cited.

As an incident of the hearing, a strong effort was made to have private car lines declared to be common carriers engaged in interstate commerce; so that the charges which the refrigerator car lines make for icing perishable freight in their cars could be regulated by the Commission. In this proposition the railroad representatives present seemed to take no other interest than rather to approve of it, neither did they any longer appear to care for the legalization of pooling associations. Their arguments were mainly directed against any declaration that the Commission should enforce orders definitely fixing rates for the future that could not be suspended pending an appeal, and particularly that no penalties should be incurred by the railroad companies for having applied the higher rate during the appeal, in case that the order of the Commission should be finally upheld.

There was considerable complaint at the protracted delay in final determination of cases that had been appealed. The delay seemed to have been divided between the Commission and the courts, and it was sought in the Cooper-Quarles Bill to reduce this delay by providing that these cases should be appealed directly from the Circuit Courts to the Supreme Court

and should take precedence over all other cases except criminal cases. The United States Industrial Commission had proposed also to give precedence to *habeas corpus* cases and to government cases.

Another objection to the Cooper-Quarles Bill was that once a rate was ordered by the Commission, it remained fixed beyond the power of the Commission itself to raise or lower it, and that ultimately no rate in the country could be touched except after complaint and hearing before the Commission; also that whatever additional power was given to the Commission under this bill with reference to action upon complaints must necessarily be extended to action upon its own motion, as provided for in the original act.

A proposition that the power of the Commission to raise an unreasonably low rate should be made clear was not favorably entertained. Indeed, a suggestion was offered that, whenever a lower rate was secretly made, such rate should be applied by the Commission to the business of the offending carrier for a twelve-month. Under a provision of this character, the offender would then lawfully secure all of the competitive business at the lower rate, unless its law-abiding competitors made a similar reduction in their rates and were thus made to share in the penalty; and, of course, with a general disturbance in all related rates.

It was asserted, in the discussion of a proper differ-

ential rate between grain and flour shipments to the seaboard, that it was an unjust interference with a manufacturing industry to maintain a certain differential, even though a lower one would result in a positive loss to the railroad company; on the ground that the company should submit to such a loss because it was performing a public service and was the recipient of a valuable franchise.

The statement was made that for the eighteen years since the passage of the Interstate Commerce Law, 90 per cent of all the questions presented to the Commission had been adjusted without the necessity for a formal hearing, and that, out of the remaining 10 per cent, scarcely 2 per cent had been the subject of litigation. Out of 194 formal decisions against the railroads, they had litigated 43; only 25 of these related to rates. In 22 of the 25 the Commission was reversed in the courts. In one case its order was affirmed absolutely, two were partially confirmed and partly reversed. These 25 cases were all that had been litigated in eighteen years with respect to the rates applied to the traffic of the whole country. For ten years prior to 1901, the Commission sustained 31 complaints of discrimination between localities, being an average of 3 per annum; of these 31 complaints only one was sustained by the courts, and not one case of alleged unjust and unreasonable rates *per se*.

The railroad representatives did not object to a

uniform classification throughout the country. They said that the railroad managements had attempted to frame one, but found the difficulties insurmountable; that differently arranged classifications were required to suit the prevalent conditions in different regions.

It was recognized that there could be no efficient regulation of interstate traffic by law which did not cover the rates by water on business competitive with the railroads. The law now covers rates partly by water and partly by land, where the water transportation is controlled in the railroad interest, but it does not cover rates solely by water, nor does the suggested legislation. The competition of railroads with water routes is justifiable so long as there remains any profit above bare cost, and it is to the public interest that it should be so. The railroads alone have enabled inland points to compete with ports that have free navigation to important markets, as in the development of the mining regions in the Rocky Mountains and of grain growing on the prairies of the Trans-Mississippi territory.

Legislation to define the powers and functions of a commission to regulate rates on interstate traffic in conformity with the provisions of the federal Constitution should recognize the following propositions: the declaration of an unreasonable rate is a judicial function; the declaration of a rate which shall govern

in the future is a legislative function; the commission is a prosecuting body exercising administrative functions for specific purposes. The problem to be solved by legislation is how to contrive it that a prosecuting bureau, endowed with inquisitorial powers to detect crime, whose findings are to be held as *prima facie* evidence in the courts, can exercise delegated powers of legislation and at the same time sit as a judicial tribunal to do justice between plaintiffs and defendants. This problem has been solved in Virginia by the creation of a new constitution, in which the executive, judicial, and legislative powers are required to be forever kept separate, "except as hereinafter provided."

It was suggested by a railroad representative that this complex problem might be solved, without such an amendment to the federal constitution, by the creation of a special court with jurisdiction over cases arising under the Interstate Commerce Act, with power to pass upon all rates adjudged unreasonable by the Commission on complaints, before the orders of the Commission relating thereto should take effect; that there should be no appeal to the Supreme Court except on questions of law, and no stay pending the appeal; that all private car lines, fast freight lines, and water lines engaged in interstate traffic should be brought under the jurisdiction of the Interstate Commerce Act; that common carriers should not be prohibited from making reasonable agreements

among themselves for the maintenance of lawful rates, both rates and agreements to be subject to previous approval of the Commission.

If the railroads should in the future, as in the past, acquiesce in 90 per cent of the orders of the Commission, it might not be necessary to establish a special court for hearing such cases, but to provide instead for special sessions of the Circuit Courts for that purpose. The appeal would be stopped at the Circuit Court, except on questions of law, and there would be no stay of the court's decision pending a direct appeal to the Supreme Court. There is, however, an objection to the establishment of so many independent courts of last resort, an objection which has been experienced in the determination of the power of receivers in railroad foreclosure cases. The conflicting decisions of the Circuit Courts of Appeal in these cases often could not be harmonized, and great confusion and uncertainty ensued. Such a result in cases affecting the traffic of the whole country would be extremely unfortunate.

It would seem that, to keep the legislative and judicial functions separate, as required by the Constitution, the powers respectively relating to them must be exercised by separate agencies; that the Commission empowered to inquire into complaints arising under legislation regulating railroad operations should declare in its findings in what respect, if any, the restrictive

legislation had been disregarded. In doing this, there seems to be no other way to insure substantial justice than for the Commission also to express an opinion as to the extent to which such restrictive legislation had been disregarded or, in plain language, to say not only that a rate complained of was unjust and unreasonable, but also, what would be the proper rate under the conditions found to exist in the case in question.

The railroad people say that, in the past, they have acquiesced in 90 per cent of the orders of the Commission. As to the cases in which they do not acquiesce, they stand in a double attitude, as alleged violators of penal restrictions upon their actions, and as being charged with having inflicted pecuniary injuries on certain persons. As alleged violators of a penal law, the Commission should proceed against them after the manner of the Massachusetts law; that is, when in its judgment any common carrier had violated, or neglected to comply with, the provisions of any act regulating interstate traffic, it should give notice thereof to such carrier. If the common carrier should, within a prescribed period, signify an intention to conform to the judgment of the Commission, well and good; but, on failure to do so, the Commission should present the case to the Attorney General for such proceedings thereon as he might deem expedient. This would not preclude civil action by the complainant to secure reparation for the injury to him. If it

was of sufficient amount to justify the chances of litigation, it is still open to him to go into the courts, and to present the findings of the Commission and the subsequent proceedings thereon as *prima facie* justification of his claim. Under this mode of procedure, the separate elements of public and private interest are kept distinct, while the usual methods for the adequate protection of both are secured to them. The party accused under a penal act is also secured in the constitutional right that "the trial of all crimes, except in cases of impeachment, shall be by jury," and also that "in suits at common law, when the value in controversy shall exceed \$20, the right of trial by jury shall be preserved, and no fact tried before a jury shall be otherwise reëxamined . . . than according to the rules of common law."

It would seem that the matter of a suspension of an order of the Commission should be largely determined by a consideration as to where the greater burden of irreparable damage would fall. If the order bore only upon a particular case, the damage to the complainant by delay in the application of a just order might be so much greater in comparison with the probable loss to the carrier or to any other interest, if it proved to be unjust, as to warrant its application pending final adjudication. But where the application of the order would greatly disturb established business relations and probably result in the readjust-

ment of collateral rates on a permanently lower plane, the possible losses to individuals would be of so much less moment than the irreparable injuries on a much larger scale, which would inevitably ensue, as to justify the *ad interim* suspension of the order.

This view is in accordance with the decision of Judge Speer of the Circuit Court for the Southern District of Georgia in the case of the Georgia Saw-mill Association, in which the court was asked to enjoin an advance of 2 cents per 100 pounds in certain lumber rates. In that decision the court says: "It is easily conceivable that a case or cases of this general character might be presented on which it would seem obligatory on the court to grant an immediate injunction. Such injunctions, however, should not be granted save in the case of grave and impelling exigency. Judicial action should be ever conservative, and rarely is such conservatism more plainly required than when the vast commercial operations involved in interstate transportation will be arrested or disturbed."

Efforts to restrict the right of appeal from the orders of the Commission, as from any other court of inferior jurisdiction, will surely prove to be abortive; and litigated cases involving the justice and reasonableness of railroad charges should take the same course to final determination that is taken by other causes of paramount importance. With a proper separation of administrative and judicial functions, the courts

would not be called on to decide so many constitutional points, and they will not concern themselves with other matters than questions of law; so that thereby the causes for delay in the appellate courts would be materially decreased. If the complaint is of delay in the hearings before the Commission, it is in the power of that body to reform its procedure in the light of its own experience; but if it be unnecessary delay in the courts of which complaint is made, that should be the subject of a separate statute. Nothing definitive can be accomplished by hasty and impatient legislation. It will all come to naught in the clear, cold light of the Supreme Court.

Fears have been expressed by railroad representatives that any power given to the Commission to define a fixed measure of alleged departure from a just and reasonable rate, that is, to express a judgment in figures as to what a just and reasonable rate should be, would cause a timorousness among railroad managers about changing existing rates themselves, making them prefer to leave it to the Commission first to determine any changes in rates. The very fact that there were filed with the Commission in 1903 some 160,000 tariffs and over 250,000 concurrences in joint rates demonstrates the fallacy of such a notion. The Commission could assume no such general rate-making power, simply because it would be impracticable. Only in the cases in which

the railroad companies acquiesced would the ideas of the Commission as to exact rates have any immediate effect; for in the other cases, in which the railroad managements felt that the orders of the Commission were erroneous, they would have all the protection afforded to any other interest which may be affected injuriously by restrictive legislation.

Indeed, the action taken by the railroad managements recently, in voluntarily submitting the adjustment of differentials at the North Atlantic ports to arbitration by members of the Interstate Commerce Commission, rather precludes them from questioning the competency of the Commission, *in banco*, to fix just and reasonable rates, since this is one of the rate problems most difficult of adjustment, one which the managers of our most important lines had confessedly been unable to determine among themselves. We cannot but surmise as to their attitude if the Commission had officially acted upon this matter without their invitation. On the other hand, should any person feel aggrieved by the discrimination caused by the application to his business of the differentials so established, he might logically protest against the hearing of his complaint by members of the Commission who had already prejudged it as private individuals. If they had done this in their official capacity, it would have been a step toward the suppression of legitimate competition, as well as a possible

infringement of the constitutional inhibition against giving preference by Congress through any regulation of commerce to the ports of one State over those of another. The impatience expressed by certain government officials at the obvious interpretation of this provision of the Constitution, as meaning what it says, emphasizes perhaps the force of this criticism.

It is not to be supposed that the Commission would hold that a rate once held by the courts to be reasonable would necessarily remain immutable, either if it had been so established by the judgment of the Commission or of a traffic manager. The changing circumstances of interstate commerce demand changes in rates as in other conditions affecting it, and a rate fixed in accordance with the views of the Commission would probably be reviewed by that body on complaint. If not, the carriers could change the rate themselves, and trust to the justice of their cause for support by the courts.

Any practical view of the effect of the findings of the Commission must include a recognition of the sensitiveness of railroad managements to public opinion. The Commission is well aware of the force thus exerted, as is shown by the course which its members pursue in laying their own opinions informally before the public through addresses and publications in the papers and magazines. Perhaps it is from deference to the force of public opinion that the railroads have acquiesced

in many findings of the Commission which did not really accord with their own ideas.

The most serious point of difference between the railroad managements and the Commission has arisen from their respective attitudes as to the application of the "long and short haul clause" of the Interstate Commerce Act, and particularly with reference to the final proviso in Section 4, that the Commission may in special cases upon application prescribe the extent to which a carrier may be released from the operation of this section. The railroad companies take the view that the proviso is permissive and not mandatory, that though by conforming to it they may be relieved from having their action questioned in such cases, they prefer to determine the matter for themselves, and to trust that their action may prove to be legal.

There is some justification for the railroad attitude, not only in their own interest, but in the public interest as well, for it is just this proposition which is applicable to every modification of business relations throughout the country. Such modifications of rates are called for daily and hourly everywhere, for the furtherance of business enterprise. The demands made for them are not only multitudinous and imperative, but they are also conflicting, and each response to such demands must recognize the inevitable reaction upon other interests whose relations to particular cases may

not be obvious. An impartial consideration of these facts leads to the conclusion that it is far better for the carriers to determine such questions themselves, and then take the resulting responsibility, than to hold commercial activity straining at the leash while the Commission, in an application from them for relief, has the pros and cons discussed by commercial associations interested on different sides of the proposition, and until the courts make a final adjudication. On the other hand, when the action of the roads is questioned, it is not the interest of the consumers that is held in abeyance. It is a question which of two rival centres of distribution shall serve them at the same price. It is a matter of differential rates between competitors that is being determined, which involves principles of far-extended application, and to which, when finally decided, the commercial relations of a broad territory may have to be readjusted.

At these hearings the middlemen assume to speak, not only for themselves, but also for the class whose relations to railroad rates is not, like theirs, one of contract, but one of status; like that of the millions of consumers who are really unrepresented. It is these who bear ultimately the cost of production, the transportation charges, and the profits of the middlemen, in proportion as the incidence of these burdens may be respectively determined by the principle of supply and demand. It is these who are without

a voice in the making of rates on the commodities which they consume, and who are incapable of self-protection by reason of their lack of organization. These it is who have a right to claim that protection from the State, which can alone represent them, when they really need it; and it is only a question, first as to what they need, and then as to the efficient means to secure it for them. On this foundation rests the justice of State regulation of railroad rates and the equitable mode of such regulation.

It is a wise maxim that a government by the people should not interfere unnecessarily in the people's affairs, and to this very matter of discrimination between localities that maxim is applicable. At points of natural competition all that is to be guarded against is discrimination between persons. Traffic will as surely tend toward those points as water flows downhill. The magnitude of the traffic thus concentrated at points of natural competition will secure to them rival routes for its distribution. Then there arise the abuses of unrestricted competition between these rival routes which first affect the interests of contract shippers by secret discrimination as to the terms of special contracts. Such abuses may be minimized by absolute publicity of all contract terms and by their general application under like conditions to all desiring to enter into them. If these conditions are secured by government regulation, the interests associated with

any one natural centre of competition have been reasonably protected.

But rivalry between railroad companies may bring about such a reduction in these contract rates as will injuriously affect interests at points adjacent to or between natural points of competition; that is, the interests of local traffic. They may be directly affected by the diversion of business, or indirectly by the imposition of an undue proportion of the general cost of operation and maintenance of the railroad property. What should be the manner of government regulation to remedy these ills? As far as the discrimination is due to natural environment, these local interests were at a greater disadvantage before they had a railroad, and it is not in the power of the railroad company to remove them altogether. As to the discriminating conditions of service, it is in the power of any railroad company to give its local patrons as good service as is enjoyed at competitive points. This is only a question of reasonableness which could be referred, if necessary, to the courts for determination.

A discriminating condition as to rates is not so easily to be determined; for this is not controllable solely by the management of the road whose local patrons may be injured thereby. It is controllable only by the joint action of all the rival lines, by water as well as by land. Any one of them can fix a minimum rate to be applied to competitive business, but all must

join in a maximum rate on such business. This is a case that might well be left to agreement among them. Let them determine the rates on competitive business, and they will probably secure their observance by a division of traffic which will give to each line all the profit that it could reasonably expect from unrestricted competition. What will then be the result? Their natural environment will secure to the interests at the competitive points all the advantages to which they are fairly entitled, while the pooling agreement will relieve the local traffic on each of the rival routes as far as practicable of an unfair proportion of the general cost of maintenance and operation of the railroad property.

The same reasoning applies to discrimination at other points of competition. No clearly defined line can be drawn between the circumstances under which competition is either controllable or uncontrollable. The conditions prevailing at a natural competing point diminish in influence as they radiate from such a centre; so that there need be no abrupt change from minimum to maximum rates with increasing distance, but a gradual increase to be determined by experience. The measure of this gradation can also be determined by agreement between the radiating lines in such a way that neither shall divert the local traffic of the other. By similar agreements, rival companies can fix the measure of influence exerted at their junction points by the

proximity of natural centres of competition. They can do so if they will, for they have both the necessary control and the necessary experience. They will make agreements if they are permitted to do so, but all will not keep them, unless they are made to do so by external control; and this brings us to the point at which the government should intervene in the interest of the helpless class. Only by insisting that competition shall be restricted within reasonable limits can this class be protected against unjust discrimination, and it is that interest which should demand the legalization of pooling agreements. It is no more necessary that these agreements should be approved in advance than that freight tariffs should be, but like the tariffs they should be made public, and be subject to government regulation upon complaint. The opposition to this course has had its seat in the powerful interests that favored discrimination, because it would have deprived them of the unjust advantages which they were enjoying over their less fortunately situated neighbors; and now the great railroad corporations no longer advocate pooling, because they have found something more to their liking in the restriction of competition, and that is the consolidation of rival lines.

The closer consideration is given to this subject, the more cogent seem the reasons in favor of legalizing pooling. Pooling under government control, to my mind, reconciles in the public interest the conflicting

forces of competition and of combination, by securing the observance of uniform published rates on a reasonable basis, and by preventing secret and corrupt practices. The opposition to pooling agreements has been extended to all traffic agreements by the interpretation put upon the Anti-trust Law by the Supreme Court. Joint rates must be made by connecting railroad companies, as the business of the country cannot be carried on without them. How they are to be made without agreement between the companies interested in the joint traffic is beyond my comprehension, and it is beyond the limits of practicability. Therefore traffic agreements are still made, the fiat of the Supreme Court to the contrary notwithstanding; and they must be made, not in restraint of trade, but because trade cannot exist without them.

I have plodded through a thousand and more pages of evidence taken at hearings on proposed amendments to the Interstate Commerce Act. In all these hearings the voice of selfishness alone is heard, either outspoken or screened behind an apparent solicitude for the public welfare. The bulky volumes are filled with the views of the representatives of railroad companies, of mercantile associations, of corporations engaged in the manufacture of important articles of consumption, and of the expositors of economic nostrums. Sound each of their arguments to its depths, and you find that they all sink into the same stratum, that they

are directed to the prevention or to the expedition of the same purpose; and that is, the transfer of profits from the treasuries of corporations engaged in the service of transportation into the treasuries of other corporations engaged respectively in the services of distribution or production, or of their intermediaries.

It was gratifying to me to perceive from the questions asked by the members of the committees conducting these hearings that this fact was just as obvious to them. I was amused at their dexterity in stripping off the masks of sincerity, and in displaying the real motives of those who wore them. One thing is sure, whatever legislation these committees may recommend, they will not err through ignorance. Let us trust that they will hold an even hand between the important class interests which have transferred their contests from the market-places to these forums; but let us also hope that, in doing this, the committees will not overlook the interests of the absent millions of unorganized producers and consumers.

Are these interests involved in the determination of the proper relation of grain and flour rates for foreign shipment and those for seaboard markets? In such competition between ship-owners and speculating brokers and milling corporations, has the farmer any interest? If so, let the law protect that first. Is the orange grower of California or of Florida to get a few cents a box more for the fruit of his toil by a reduc-

tion in the icing rate for the protection of these perishable commodities in refrigerator cars, or does the reduction go into the pockets of the middlemen? Is the demand that imported goods shall pay the same rates into the interior as those shipped by seaboard importers intended to protect the profits of the latter, or to cheapen the price of imported commodities to the consumers? Do the jobbing merchants of Cincinnati and Chicago seek to divert the sale of goods in Southern and Pacific markets from other jobbing merchants on the North Atlantic seaboard for their own profit, or that the many consumers of these commodities may have the benefit of the reduced freight rates?

The cry against railroad discrimination does not arise from the small producers or ultimate consumers, but from the intermediate manufacturers, brokers, and dealers. It is not intended that the profits taken from the railroad companies should ever reach the helpless contributors of non-competitive traffic, who are increasing in numbers as each step is taken in railroad consolidation, as each junction point ceases to be an artificial centre of competition. Therefore, the purpose to be sought in legislation for the regulation of railroad traffic should not be to preserve competition unrestricted. As long as our coasts are washed by oceans and lakes, and the Mississippi River and its affluents are kept in navigable condition, the great

centres of trade will have a choice of routes, and can take care of themselves in the matter of freight rates, provided they are protected from sudden fluctuations and from personal discriminations. But non-competitive traffic needs legislative protection against the abuses due to the increasing tendency to railroad combination.

On January 1, 1887, out of 33,694 railroad stations, 2778 were junction points. Under the ruling of the Supreme Court, the railroad companies are free in the first instance to determine whether the competition at each of these junction points is material and substantial, or whether it is artificial or merely conjectural. The competition is certainly material where navigable waters are available, and it is substantial at the common termini of trunk lines; but how many of the 2778 railroad junction points enjoy such dissimilarity of circumstances? At how many of them is the dissimilarity of conditions within the power of either railroad managements or State commissions to control? How many of them are competitive centres merely because they are railroad junction points at which the choice of routes is purely artificial and because it is the policy of competing roads that it should be so? At how many of them will the dissimilarity of conditions cease even to be conjectural when the competing roads have combined?

It is the voices from the 31,416 intermediate stations

that should be heard by Congress; it is the rates on their traffic which should be brought into a just and reasonable relation with those of such of the 2778 junction points as are merely artificial or conjectural centres of competition; and that is the intention of the "long and short haul clause" of the Interstate Commerce Act. Let that intention be made clear by appropriate amendment that cannot be made available as a weapon in contests between interests that are still free to protect themselves. Let the rates at artificial centres of competition be levelled up to the maximum rates paid at intermediate stations, or let the maximum rates paid at those stations be so reduced as to bring them into just and reasonable relation with those at junction points. This, to my mind, is the main purpose to be sought in the amendment of the Interstate Commerce Act; that is, if interstate traffic is to be regulated in the interest of the great majority of the users of railroads, and of contributors to their revenues who are not otherwise able to help themselves than through their representatives in Congress.

There are certain propositions which would seem to be fundamental in any scheme of regulating railroad rates by law. It is generally admitted that it is not practicable to do this directly by statute; for in regulating a railroad tariff directly a congressional committee might be expected to go about it in the same way that a customs tariff is framed; the most powerful

influences would secretly prevail without hope of redress by those interests which were politically helpless. Again; there are certain questions which every legislator should ask himself when he is considering the proper manner of regulating railroad rates: as, for instance, what condition of rates should be encouraged, fluctuating, discriminating rates or stable, equal rates? How do rates affect prices and who is affected by changes in them, the producer, the middleman, or the consumer? Should the regulation of railroad rates be utilized in the competition of rival commercial centres for the trade of the same region to benefit either competitor, or to create artificial points of competition for one railroad to take away the traffic of another? If it be the intent of the Interstate Commerce Act to prohibit discrimination in facilities as in rates, should it not cover the regulation of private car lines, terminal switching charges, and private branch lines?

If a general power for rate-making is to be given to the Commission, should not its attitude toward the railroad corporations be prescribed by law; should it not be clearly an impartial tribunal with an independent prosecutor and not itself a prosecuting agency, with powers that might be utilized in a partisan or sectional spirit. It should be, in fact, a court of first instance. Now, a court of first instance acts solely on complaints. Only after it has been sustained on appeal does its decision apply to complaints of

the same class. The lower courts decide cases; the higher courts, principles. It is a fact born of experience that quasi-judicial commissions tend to become inquisitors. They do not wait for complaints, but act on their own motion upon information; for that reason, experts are out of place on such commissions; their proper place is on the witness stand.

The very general interest taken in the discussion of the legislation now pending in Congress as to the amendment of the Interstate Commerce Law has led me to devote this chapter to a consideration of the opinions and statements advanced in connection with that subject. I propose to devote the next to a consideration of the State control of railroad corporations on broader lines.

CHAPTER XI

STATE CONTROL OF CORPORATIONS ENGAGED IN A PUBLIC SERVICE

THE basis of control is might. The might of the absolute monarch was exercised to fill his treasury and to maintain order among his subjects, and these two purposes persist in our civilization in the taxing power and the police power. Both of these powers are still exercised for the benefit of the sovereign, of the sovereign people, who have dethroned the monarch and reign in his stead. The property rights of each of these sovereigns are protected by constitutions and statutes from excessive or unequal taxation and from unduly restrictive police regulations as by a shield, so long as they are applied to private purposes; but the same constitutions and statutes become thorns in the sides of the possessors of the same property rights when they are devoted to the public service.

The miller might grind his own corn without interference of the sovereign power, but not the corn of his neighbor. Then he was no longer his own master, but a public servant, and that servitude has been transmitted to the owner of the elevator through which mil-

lions of bushels of grain pass between trains and ships. A similar servitude burdened the franchise of any monopoly, and with greater appearance of justice, since it was a condition attaching to the acceptance of the grant, a condition more particularly warranted when the franchise for a turnpike included an exercise of the sovereign power of eminent domain over the property rights of other persons. The exercise of this power necessarily called for a more careful regulation of its use by a private individual for his own profit than when that power was invoked solely in the public interest; and this regulation developed along a continuous line of precedents until it was applied to the combination, in a single private interest, of the franchises of eminent domain and that of toll-gathering in railway transportation. The courts struggled for a long time with this novel problem, striving to solve it according to the analogies of common law.

In granting the franchise of incorporation, Parliament had created an artificial person, and had endowed it with the privilege of exercising these other franchises. Nourished by the concentrated savings of the many, this artificial person soon attained gigantic stature, while its strength was directed by the sharpened intelligence of a few for their own aggrandizement. In its protean aspects, the giant eluded the jurisdiction of the courts, and Parliament grappled with it, relying upon its own traditional omnipotence. Neither the

courts nor Parliament could satisfactorily define the limits within which a chartered company should exercise its corporate rights in an untried field; for decrees and statutes are but the application by the State of the results of individual experience, and must therefore follow, and not lead, in the development of any phase of human activity in the public service. That the disregard of this truth was the ultimate cause of the failure of the successive experiments in railway regulation in Great Britain seems proven by similar results in this country, and, now that we have followed the course of government regulation in the several distinctive fields of railway operation, it may be worth while to seek for the fundamental source of error in such regulation.

No control of human activity by external authority can be ultimately successful that does not take into account the appetites, passions, and emotions which are the mainsprings of such activity. Fundamentally, competition and combination are manifestations of animal appetites, passions, and emotions. Therefore, while such manifestations may be *regulated* by external authority, any effort for their *suppression* is like weighting more heavily the safety-valve of a steam boiler; eventually there will be a reaction and possibly an explosion. The proper mode of regulation is in their intelligent direction. As manifestations of human energy, competition and combination have their useful

as well as their injurious tendencies. In one way they advance the welfare of individuals and of communities, as in another they exert a retarding influence; accordingly as they serve to stimulate or to repress the prosperity and happiness of society.

No competition is wholesome which drives the individual to the wall. Any combination is dangerous to society which constricts the social or political development of a nation. Competition is based upon individualism; combination, on collectivism. The former tends to diversity, the latter to uniformity. The one stimulates men to personal advancement, the other classifies men in ranks. Being in themselves the outcome of human emotions, they have both a moral and an ethical aspect, moral as to the individual, ethical as to the community. Like all other manifestations of human emotions, they should be amenable to external authority when they injuriously affect either individuals or the community.

Competition, originating as a struggle between individuals, becomes extended to families, clans, tribes, castes, classes of society, and ultimately to nations. Indeed, we may enlarge our view of competition, and say that it arrays one order of civilization, the European, against another, the Oriental, when the latter is spoken of as "the yellow peril." Individuals associate in groups in order the better to compete with each other, and combination is therefore an orderly

procedure from competition. The groups become enlarged as the competition becomes more strenuous, and they are then held together by family ties in clans, by industrial interests in guilds, by interests of State in armies, by religious interests in monastic orders, by political interests in factions, as well as in corporate bodies in the pursuit of wealth. So it is that competition has become a factor in the intellectual, moral, ethical, and social uplifting of humanity in its successive stages of civilization. Within each group there is a tendency to stifle competition, to bring about uniform conditions, and, by uniting individual agencies under a single control, to strengthen the group in its external competition, until the struggle becomes international or racial.

Opportunities for individual competition cannot lift a man above that social or economic position to which his physical and mental powers entitle him, but they afford him a field in which to strive for that position. Combination tends to average the physical and mental capabilities of men in classes, and to keep each in his class by defining the limits within which he is free to exercise his capabilities; that is, his fitness for a certain economic work. Modern governments exercise this function in the classification of public servants, yet in doing so they have extended the opportunities for competition beyond the limits to which they were restricted when these positions were filled by patronage.

The interaction of the factors of competition and combination in human affairs has extended with time until it covers the face of the earth. This interaction has been minimized in severity by the elimination of cruelty from warfare and of slavery from industrial pursuits, as also by the amelioration of social conditions. It has raised the European nations from savagery to civilization, and has recently fevered the sluggish blood of the yellow race. The regulation of competition in savage life is in accordance with the laws of animal nature, in which physical superiority is the test of success. As savages become grouped in clans and tribes, their physical powers are exerted under a leader whose mental superiority becomes the test of his efficiency in the struggles between the groups. As these increase in size, the field of competition is enlarged, and the physical and mental efforts of their members are coördinated by customs. These customs become formulated in laws which diminish the number of objects of competition within the group by the protection given to the family, by the security afforded to private inheritance, and by the establishment of other vested family rights. On the basis of family rights, class distinctions arise and become the subjects of State regulation, usually in the interest of the more powerful classes; until at last a plane of legislation is reached in which the public welfare is supposed to be recognized. It follows that whatever class is for the time

in authority, while ostensibly exercising a control for the general good, is in reality seeking to serve its own interests; and this brings about the condition of society in which the State exercises authority over property rights without any responsibility for their pecuniary returns to the persons in whom they are vested. The sovereign monarch seizes the property of his subjects to satisfy his desires. The sovereign people controls the use of private property when applied to its service, which is but the control of the rights of one class, the owners, in the interest of another class, the users. This separation of the control of property rights from the enjoyment of their usufruct has extended with the evolution of civilization, and it may be viewed as the administration of property rights by a naked trustee.

The answer to this is that it is but a regulation of the means by which certain ends are attained. The end, so far as the public welfare is involved, is the satisfactory rendering of a public service. The end to which the property rights are devoted by their possessors is the greatest profit to themselves. The regulation of property rights devoted to a public service is not therefore the administration of these rights by a naked trustee, when the trust is administered by public authority. There is a conflict of class interests, it is true, and the measure of reasonable control in the public interest is to be reached by an equitable

balancing of those interests; that is, by such a regulation of the use of property rights in a public service as will give to the users of the service the greatest possible satisfaction commensurate with a fair return to the possessors of the property rights devoted to that service. This view is strengthened by the fact that the intrinsic value of these rights to the possessor results from their application to a public service. The existence of a public interest in the use of certain property rights having been established, and also that the value of these rights to the possessor lies in such use being made of them, it follows that both parties interested should have a voice in the control of this application of property rights to a public service. This is not a joint control to a common end, but a divided control to different ends, yet the ends of both are only to be served by the successful outcome of a common purpose.

Let us now apply these general considerations to the regulation of railroad operations. To avoid confusion and failure, a divided control should be exercised in separate fields of action, in such a way that they may be coördinated to the common purpose, which, in this case, is the transportation of persons and property. The end desired by the users is that this service shall be rendered with convenience, safety, and despatch; the end sought by the possessors is the greatest possible profit to themselves. This diversity of ends in-

dicates the separate fields of action for the divided control, and also the bordering zone in which they overlap. It is to the interest of the possessors that the users should be induced to make the greatest possible use of the transportation facilities; while it is to the interest of the users that they should pay the least possible compensation for the use of those facilities.

It is in this bordering zone where two separate fields of action overlap, where one party seeks to derive the greatest possible profit, and the other to pay the least possible compensation in the application of property rights to a common purpose, that the conflict of interests takes place in the State regulation of railroad charges. The State bases its claim to such regulation on several grounds: on its sovereign power in general, on the dedication of property rights to a public service, and on its reserved power to regulate the use by private persons of the several franchises granted to them of incorporation, of eminent domain, and of collecting tolls. In those States where the sovereign power rests in the people, they usually prefer to retain as far as possible their own individual freedom of action, and to exercise the sovereign power for their general benefit only where individual action is impracticable or injurious to others.

It is for this reason that, in Great Britain and in the United States, it was left to private capital to build and operate railways for the public benefit, and it was

to this end that the sovereign power was delegated to private persons whose means were concentrated for this purpose by incorporation. The subsequent regulation of railways by State control, in the same countries, was sparingly applied at first. Freedom of action was permitted to each railway company within the limits prescribed by common law to all persons and property rights alike, and the application of statutory law to railway operations specifically was but gradually extended as the users of railways found themselves individually incapable of exercising their own freedom of action in such use, and ascertained by experience that no adequate assistance was afforded them by the common law.

When resort was had to statutory regulation, it was found difficult to restrict the freedom of action of the railway corporations without a corresponding restriction of the freedom of action of the users of the facilities that they furnished. In granting the franchises incidental to the operation of railways by private persons, the State had apparently granted monopolies, but the railway companies were only monopolies in a restricted sense. Wherever they came in contact with other means of communication, they did not monopolize all transportation facilities. To the extent that these other means of communication furnished an equally satisfactory service, they were rivals to the railway companies; and between these rivals that

spirit of competition was aroused that is innate in every individual of normal appetites and emotions. The users of the rival means of transportation were greatly benefited by this competition, a benefit which was not enjoyed by those who were dependent upon railroad facilities alone. Over their facilities for transportation, the State had indeed granted a monopoly to the railway companies.

The users of railway facilities, accordingly, were divided into two classes, those who enjoyed the advantages of competing routes, and those who did not. With the extension of railway construction, new centres of competition were established wherever one corporation entered a field before monopolized by another, and, as both afforded the same character of facilities, the competition became more severe than where the competing route was a highway or a waterway, and its effect upon the profits of the rival companies was all the more disastrous. It was at this stage of railway expansion that the occasion for the regulation of railway operations assumed another aspect.

Hitherto, the freedom of action of railway companies had been restricted in the interest of public safety and of private rights of property, matters strictly within the field of State control. In the overlapping zone of conflicting interests, the State had sought to control the railway charges only to prevent them from

being excessive or extortionate. The lack of profitable return to the possessors of railway shares was not a matter of public concern. The investor took his own chances in the outcome of the application of his money to a public service. His company had been given a franchise, and was permitted to do the best that it could for itself with that franchise, so long as it did not exact an unreasonable compensation for the special service that it performed for each individual. It could not increase its charges unreasonably, but it could diminish them as it saw fit, and it was in the exercise of this alternative that it gave occasion for the further regulation of its charges. Where each company could retain a monopoly, it could maintain its rates; where it could not, it reduced them as much as seemed necessary to retain its traffic or to increase it. The possessors of property rights in a public service had not only the privilege of fixing maximum rates, a privilege which could be restricted within reasonable limits, but they had also the privilege of fixing minimum rates and of directing the incidence of rates of either kind on different users of their property, — of discriminating between those who enjoyed competitive facilities, and those who did not.

The period of statutory legislation against discrimination then set in; but legislation against discrimination in rates was not so easy of application as against excessive charges, for, in the latter case, the users were

banded together against the possessors, while in the cases of discrimination the users were separated in two classes, those who were discriminated for and those who were discriminated against. The only legislation which would not bring these two classes into conflict was that which tended to give the latter the benefit of the lower rates which the former enjoyed. In this way, the separate control exercised by the State was exerted in the overlapping zone of the conflicting interests of users and possessors for the sole benefit of the users, a clear case of class legislation. The railway companies whose rates were thus being regulated by a power beyond their control took counsel among themselves, and sought to avoid discrimination by applying maximum rates to all traffic which was competitive only between themselves. This policy dissatisfied both the class of users from which the minimum rates were withdrawn, and the class which had hoped to obtain them by State intervention.

When they were deprived of this mode of restricting competition in their own interest, the railway corporations were powerless to control the pecuniary results of their operations. They could not apply maximum rates to competitive traffic, and any lower rate resulting from enforced competition they had to apply to their other traffic. Since they could not limit the common field of competition separately, and were not permitted to do so by agreement, they availed themselves of that

other intuitive tendency of mankind which is the complement of competition, and resorted to combination. They availed themselves of the privilege incidental to the franchise of incorporation to merge or amalgamate two or more railroad companies into one, and thus to substitute, for the temporary agreement for restricting competition by pooling, a permanent restriction by consolidation. In doing this, they presented another phase in the application of property rights to a public service to be regulated by statutory law.

The suppression of competition by the consolidation of independent railroad corporations has served to extend the field of usefulness of government control, which the legalization of pooling associations would have restricted. This process of consolidation was sometimes resisted from within, by differences of opinion among the possessors of the corporate rights; but their freedom of action was restricted by a combination of the greater number in each of the competing corporations. As long as such combinations affected only these interests, the State had no reason for intervention, except to ascertain how far other unrepresented interests would thereby be affected. In cases where the competing corporations were dissociated links along a single line of communication, even though by their consolidation minimum rates might be withdrawn from former junction points, the users at intermediate stations were relieved from such discrimination, the through service

was better performed, and the welfare of the majority of possessors and of users of the combined transportation facilities was harmonized in the consolidation.

But when the same process was applied to the consolidation of rival lines of communication between important commercial and industrial centres, it was impracticable there to harmonize the interests of the respective majorities of possessors and of users, and the State inclined to sustain the forces of competition against those of combination. To evade this policy, human ingenuity devised an alternative plan for restricting competition by depositing the majority control in each company in a single corporation, organized for that express purpose. This novel condition has been recently regulated in the United States by the passage of the Anti-trust Law; and now the possessors of the majority interests in competing corporations are driven to their last ditch. Relying upon the uniform protection accorded to the rights of personal property under our constitutions and laws, they are uniting these undisputed rights of theirs in a community of interests, in which the control of rival corporations is combined by an equal distribution of the corporate rights in each of them among a few individuals. To control this situation, the State must rise above the regulation of railroad rates to the regulation of the manner in which individuals may apply their property rights to a public service, and this brings us

to consider how far regulation of either character should be so applied as to be equitably adjusted between the several parties in interest.

The parties interested in the regulation of railway charges we have resolved into two classes, the possessors and the users of railway property. The intrinsic value of the property belonging to the one is dependent upon the extent of the use made of it by the other. In the application of the rights of the one to the use of the other, the primary purpose of State intervention should be to insure that the service which the railway company has undertaken to perform should be conducted with safety, convenience, and despatch. So far as the freedom of action of each class of interests with respect to the other is restricted by their contract relations, there is no logical basis for the regulation of these relations by external authority, beyond that exercised by the courts in the enforcement of any contract. As between shippers from the same competitive point, the competing railroad corporations owe them certain duties, among them that the terms and conditions of each contract shall be known to all, and shall be open to all. Otherwise, let them make their own bargains and stand by them. But the status is different of those users of railroad property who have no freedom of action in their relations with the owners of that property. These people are subject to a monopoly exercised through franchises

granted by the State, and the State, therefore, owes it to the one class that the monopoly granted to the other class shall be exercised justly and reasonably. This is the equitable basis for the regulation by the State of railroad rates *per se*, that they should be just and reasonable in themselves.

The contracts made for competitive traffic may be of such a character as to affect the welfare of a class of railroad users who cannot help themselves in the matter of rates, and who, in consequence, have an equitable interest sufficient for the State to intervene in their behalf and to inquire whether the railroad company has entered into contracts which unjustly or unreasonably discriminate against them. This seems to be the foundation for the regulation of railroad rates on competitive traffic, that such rates should not affect injuriously the interests of other parties, who had no voice in making them. It is but just that the State should exercise this regulative power in connection with the franchise granted for the collection of tolls. The twofold standard, then, of the regulation of railroad charges, that they should be just and reasonable in themselves, and that, in their incidence upon individuals, they should not result in unjust and unreasonable discrimination, seems to be as well founded in justice as in law. But the users of railroad property in competitive traffic have no equitable claim for State intervention in their behalf other than this, that the

courts should enforce the contracts which they have lawfully made with the possessors of railway property. Thereafter let the maxim of *caveat emptor* apply.

The State through its courts is called on to determine whether a charge made to a user is just and reasonable in itself, and whether the contract made with some other user unjustly and unreasonably discriminates against a third party. Even though the fact of the injury may be established, the discrimination is not unjust if it arises from causes beyond the control of the party to whom the railroad franchise has been granted, as in the case where there exist dissimilar circumstances of environment of a natural character. But where such circumstances have been artificially created, as by competition between two railroad companies at a common point, it is for the State, and not for the two companies, to determine whether the competition at that point injuriously and unjustly affects the interests of third parties, and if this is found to be the case then to require that such unjustly discriminating competition shall cease. This discrimination might be removed by the joint action of the two railroad companies in ceasing to charge lower rates at the junctions than maximum rates, but the State will not permit of such agreements, because they restrict competition. If unrestricted competition is to be insisted upon, at junction points, and the rates at adjacent points are to be made in conformity with these competitive rates,

then the possessors of property rights used in a public service are restricted in the pecuniary returns from that use by the intervention of the State. The railroad companies are not permitted to control their property rights in such a way as to prevent unjust discrimination except by pecuniary loss to themselves.

The general scheme of rates applied by a railroad corporation to its traffic may result only in reasonable profits, and yet the incidence of some one of these rates upon a certain class of that traffic may be unduly burdensome upon shippers who are compelled to pay the maximum rates. In such a case the State might well intervene in their behalf; but in doing so, it is only a readjustment of the burden that should be required,—a shifting of a part of the load from shoulders that should not bear it to those that should. For if the total result of the whole scheme of rates be but a fair profit, any partial reduction in one case should be accompanied by a corresponding increase elsewhere; otherwise the railroad corporation would be unjustly dealt with.

No one can limit the power of an absolute monarch over his subjects. He may take their property or their lives at his pleasure; but where the sovereign power is in the people, and is exerted through their representatives, if that power be exercised for the benefit of one class of the people by fixing the price which that class shall pay for the use of the property of another class, the moment that the price fixed is placed at a

figure below a just and reasonable rate, that property right has been taken without just compensation.

In its attempts to protect one class of users of railroad property against the evils arising from combination among the possessors of that property and, at the same time, to preserve to another class of users the advantages of unrestricted competition, the State has thrown the whole burden of harmonizing these conflicting conditions upon the owners of the railroad property. The value to them of the franchise for the public service, to which their property has been irrevocably devoted, rests in the use made of it by the people, and upon the compensation for that use. That the compensation should neither be unreasonable in itself nor unjust in its incidence is what the State should require, and, so long as these requirements are fulfilled, the possessors of the franchise are justly entitled to all profits that should accrue to them under these requirements, just as they would also have to bear all losses that might ensue under them. Any additional requirements that reduce their profits are made in the interest of one class against another, and, if the just and reasonable exercise of the franchise to collect tolls is to be limited for the benefit of the users of railroad property, the owners of that property should be reimbursed by the State for the losses which they may have suffered in consequence.

The regulation of railroad rates is one phase of the

exercise of authority over the rights of property without responsibility for the results; but when that authority is utilized for other purposes, as in the enforcement of competition at points where it does not naturally exist, the State should recognize its corresponding responsibility for the pecuniary results to the owners of the railroad property, and, to the extent that it does so, State control becomes merged into State partnership. Its voice becomes more potent in the management of the joint interests because it has assumed a partial responsibility for the pecuniary results of its own policy. This form of regulation has prevailed in the States of continental Europe since the beginning of railway construction in those countries, and has inevitably tended toward State ownership.

The acquisition of our national railroad system by the people of the United States is occasionally spoken of as a panacea for the ills under which they suffer from its being private property; but this is a proposition that does not commend itself to persons familiar with the conditions under which such public ownership could be attained or who will reflect upon its probable consequences.

The railroad system of this country is capitalized at \$12,600,000,000, about 140 times the present amount of the public debt of the United States, bearing interest. The possibility of this immense property being acquired at any considerable diminution of this capitalization

depends upon the practicability of exercising the power of eminent domain at an arbitrary valuation. Such a course is not beyond belief, but it is not so probable that it should be made the basis of any proposition looking to State ownership in the immediate future.

It would be a giant's stride toward socialism thus to nationalize one-eighth of the total property investment of the country. The purchase, if made at all, would be accomplished by the exchange of government obligations for the stocks and bonds of the railroad corporations, and this substitution of inert securities for those which give animation to the stock market would have a depressing effect upon the business of bankers and brokers. By the exchange of government bonds for railroad securities, State ownership will create a new class of capitalists with no personal interest in the further development of our national resources, secure against attack under government protection. The enormous addition to the outstanding public debt would not be considered as impairing the national credit, since it would be represented by assets that would easily provide for the interest charges, if efficiently administered. Still, the net results could not be expected to equal those obtained by private management, either in gross earnings or in economy of operation.

It is because rates are supposed to be exorbitant that government management is desired, and State

ownership could only be justified by reduction of rates on a scale made obvious through considerably decreased net earnings. The express business would doubtless be taken over, and the receipts from mail and express contracts, some \$80,000,000, would disappear from the balance sheet. If the purchase could be made in 3 per cent bonds, it would require but \$360,000,000 net earnings to meet the interest instead of the present amount of about \$435,000,000, a difference about equal to the loss in mail and express earnings; so that this would leave no margin for reduction in rates, except to the amount that would be saved in taxes, some \$58,000,000.

For all this property would become non-taxable, as also the 3 per cent bonds issued in payment for it. The right of way and station grounds would be freed from intrusion by constables serving warrants or by policemen making arrests. Only the writ of a federal court in the hands of a federal marshal would be recognized within the limits of the federal domain. Every employee, from the general manager to the track hand, would become at once a government servant, to the number of 1,300,000, a multitude before which all the present employees, civil and military, would shrink into insignificance. They would be already organized, too, not with an eye to efficient service, but to their own welfare. How these organizations would make their influence felt in the way of shorter hours and

higher pay would depend upon the way they voted; but it is not probable that their efforts would be exhibited by any decrease in the cost of operations.

There would undoubtedly be a great cry for improved train service and for better safety appliances by the introduction of the block system, and the extension of second tracks; indeed, measures of this character would be imperatively demanded. Nor would claims for personal injury and loss or damage claims be as promptly and as liberally disposed of by an ownership which could only be approached through the Court of Claims. The cost of covering the whole railroad system with a second track and with the block system is one which will have to be faced in the future by the present corporations; though they would go about it much more leisurely than popular opinion would permit if it were to be paid for by the nation. The cost of a second track would not be less than \$4,000,000,000, and an efficient block system would probably add another \$1,000,000,000 to the capitalization, while requiring a large annual addition to expense account for operation and maintenance.

The results in continental Europe are of little value as indicating the probable outcome of government ownership in this country, so long as we exist as a democracy. For there is but one democratic government in Europe that owns its railroad system, Switzerland, which has been in control for so short a time

that as yet it can teach us nothing. The only tolerable railroad service under government supervision, from our standpoint, is that of Prussia; and if our average freight rates were applied to the traffic of that country, the railroads probably would not pay expenses. Neither would our railroad employees submit to the military discipline enforced there, nor to their scanty wages.

We should guard against yielding to European views of State control. The effect is to discountenance the individual initiative to which the prosperity of Great Britain and of the United States is mainly due. The autocratic control of the Philippines is leading to State ownership of railroads there, with its attendant evils under a provincial absolutism. Industrial and commercial considerations will be subordinated to the ambition of provincial officials and to the political prospects of the home administration. Those who have a horror of socialism should beware of the government control of corporations further than in the exercise of the police power. When the government puts its hands upon their earning capacity, they become proportionately the property of the State, whether it be an autocracy or a democracy.

It would hardly seem worth while to discuss the proposition of State ownership in this country, even in this superficial way, were it not that it is possibly the goal toward which the minds of capitalists may

be directed, if government regulation should become so drastic as to deprive them of the efficient control of their own property.

In this country, the extension of authority over railroad charges, without the recognition of any responsibility for the pecuniary results, is rendered even more anomalous when that authority is made to cover the management of railroad corporations by a power that took no part in their creation. The power given by the federal constitution to Congress to regulate commerce between the States and with foreign nations was logically employed to regulate interstate traffic, but that the same power could be successfully invoked to control investments in State corporations was something for which but few were prepared outside of a bare majority on the bench of the Supreme Court. This is not the regulation of railroad rates, but of railroad investments, yet it is a stride in advance along the same lines which have been followed in legislation to assist the forces of competition against those of combination, first in the profitable application of corporate rights to the public service of transportation, and next in the application of the same rights to the private pursuits of production and distribution.

The Anti-trust Law was but preparatory to yet more aggressive legislation against corporate power. In February, 1903, Congress passed an act establishing the Department of Commerce and Labor. By

Section 6 of that act, the "Bureau of Corporations" was created. The Commissioner of Corporations was given authority to make "diligent investigation into the organization, conduct, and management of the business of any corporation, joint stock company, or corporate combination engaged in commerce among the several States and with foreign nations," excepting common carriers; "and to gather such information . . . as will enable the President . . . to make recommendations to Congress for legislation for the regulation of such commerce." To this end, the Commissioner is given the same power and authority in respect to corporations, "including corporations engaged in insurance," as is conferred on the Interstate Commerce Commission.

In the first annual report of the Commissioner of Corporations, prepared in December, 1904, he defines his bureau as "an arm of the legislative branch of government . . . placed under the executive branch . . . for the purpose of administration and continuity of action," under "the constitutional authority to legislate in regard to interstate and foreign commerce." He considers that "the means provided by Congress . . . are peculiarly appropriate for carrying out the intricate, far-reaching, and delicate work" of collecting information, not for the purpose of enforcing laws, like the Interstate Commerce Commission, but for making laws. The jurisdiction of his bureau is said to "ex-

tend over all agencies, other than individuals, engaged in interstate and foreign commerce, except common carriers," and, as he views it, "practically all the great industries may be considered subject to federal authority for certain purposes under the commerce clauses of the Constitution."

In the discussion of State corporations, the Commissioner of Corporations has reached the conclusion that the diversity of the State laws with reference to incorporation amounts to anarchy; that the principle of comity tends to lax regulation, and that the net result is thoroughly vicious. As to interstate and foreign commerce, the United States is one legislative area, and, when federal regulation enters any given State for the purpose of operating on such commerce, it enters it, not as foreign territory, but as a part of its own jurisdiction.

The Commissioner suggests that this purpose might be accomplished by the requirement that all corporations engaged in interstate commerce should be organized under a federal incorporation law, which should also endow them with a franchise to manufacture and produce within the several States. He sees a practical difficulty in this scheme, as the several States might in consequence be deprived of the power of taxation over federal corporations engaged in interstate commerce. He has therefore an alternative plan for a federal franchise or license system, under which no

corporation nor corporate agency would be permitted to engage in interstate or foreign commerce without such a license. A tax should be levied on all such franchises for the support of the bureau. This law would prescribe the necessary requirements as to corporate organization and management, and the Commissioner would have the power to refuse or to withdraw a franchise in case of violation of the laws, with right of judicial appeal to the disfranchised corporation.

This brief analysis of the Commissioner's first report is interesting, as much for what it foreshadows in the way of progressive control over State corporations by federal power as for its exposition of the law under which the bureau is organized. It will be still more interesting to learn the views of the Supreme Court on the same subject.

The overshadowing importance of interstate commerce has necessarily tended to the regulation of rates by the general government and may lead to the requirement of charters from Congress for railroads doing business in two or more States,—another step toward centralization and a further diminution of the theoretical sovereignty of the several States in the Union. Yet, if the franchise to collect tolls be a gift from the sovereign power, can one of these States constitutionally give away the right to collect tolls on interstate commerce? Federal charters might be made permissive and desirable by grants of special franchises of

value, not to be exercised under State charters, as for instance the pooling of interstate traffic; though the acceptance of such charters might be treated as a novation and a relinquishment of some privileges peculiar to certain State charters; and unless the same control covered shipments within the States, much interstate commerce might still be subject to discrimination by concessions on business not controlled by the Interstate Commerce Commission.

One thing is certain. The continuing aggregation of the cash capital of the country under corporate franchises has reached a point at which it is exercising its control over the instrumentalities of production and distribution as well as over those of transportation. These gigantic combinations may require control by the only authority in the land that can successfully cope with them, since no single State in the Union can vie with some of them in revenues nor in exercising as potent a sway in as broad a territory. It is no longer the regulation of quasi-public corporations that is demanded, but that of corporate power in general, of the power of corporations that have attained such colossal proportions as to be viewed with alarm by their own creators, as Frankenstein viewed the monster that he had himself fabricated.

CHAPTER XII

CONCLUSIONS

IN making a survey of the extensive field of private enterprise which is being steadily invaded by State control, one learns to appreciate the impracticability of taking a comprehensive view of that field within feasible limits. No attempt to sum up the several aspects of restrictive legislation in the different departments of railroad activity can cover the whole ground, nor can any views on the subject be considered as definitively conclusive upon the points to which they refer.

In following step by step the development of railroad transportation and of railroad legislation, as they have proceeded *pari passu* from their crude beginnings to their present complex relations, the conclusion must ultimately be reached that the solution of the railroad problem is to be sought in the interaction of the factors of competition and combination in the affairs of men; as in their blind struggles for supremacy, individuals, tribes, classes, and nations come under the domination alternately of the one or the other of these factors in their daily life, in their social relations, and in their national existence. In this investigation one is struck

by the futility of the efforts that have been made to anticipate in statutes the probable course of railroad development. Legislation intended to further this development for the general benefit has often retarded it, until the flowing tide either overwhelmed or evaded the statutory barriers. On the other hand, our respect for the courts is intensified as we fathom the very opposite policy that they have pursued. The course of events is not anticipated by them, it is followed. It is tested by experience, and they are guided to conclusions by the precedents thus established. As a consequence, their decisions with reference to railroad matters may have lagged behind the froth and foam of the surging tide of progress. They may have to be restated and modified, but they do not have to be retracted; and often they serve to disentangle the real intent of legislation from the confused web of statutes in which it has been involved.

Competition is essential to progress; combination leads to uniformity, which is the death of progress. Unrestricted competition begins in anarchy, but ultimately tends to combination. Unrestricted combination diminishes the field for competition and tends to monopoly. Social evolution accordingly oscillates between the states of anarchy and of absolutism. The intervention of the State in the regulation of any useful instrumentality is invoked originally to regulate competition and ultimately to restrict combination; first

to prevent discrimination, and last to prevent monopoly. Applying this general principle to State intervention in railroad operations, what has legislation accomplished that it sought to bring about? what has it prevented that it sought to obviate? These are the standards to apply to all restrictive legislation, and it is by ascertaining the extent to which measures already tried have proved successful in these respects that legislation for the future should be guided.

During the tentative stage in the development of any industrial instrumentality, competition is essential. It stimulates the physical and mental energy of man with reference to the object upon which his attention is concentrated, but as the process approaches consummation, competition becomes a disturbing factor; the efficiency of the process is increased and its potency economized by combination, through the elimination of wasteful activity, and by the preservation of all that has proved useful to the main purpose, so that the tendency in any industrial activity is toward combination and uniformity. Perfection, like a sphere, is complete uniformity, and it is the end of progress.

Competition stimulates individual activity, and it was to be expected that legislation would be directed to the encouragement of competition in railroad construction until the general desire for improved transportation facilities had been measurably gratified. When this stage of development had been reached, the ills

of unrestricted competition in transportation charges began to be felt by local shippers through injurious discriminations, and by the railroad companies in the loss of revenue. The railroad managements sought to protect their revenues by combination, where this was practicable. The application of maximum rates to traffic which had been competitive pleased neither class of users, and the State sought to please both. It attempted to continue competition at points not naturally competitive by the prohibition of traffic agreements, and at the same time to protect other points against such competition by making it unlawful for the railroad companies to discriminate in favor of artificially competitive points. This compromise legislation worked either way disastrously to the revenues of railroad corporations. It led to closer combination among them, and the State had next to legislate against consolidation, a process which had been accelerated by measures intended to keep competition between them free of restraint. Legislation to retard consolidation was a step in advance of regulating the application of rates to traffic; it was the regulation of the application of private capital in a public service.

In most instrumentalities of civilization, the abuses which creep in attract attention only as they approach a climax. By the time that legislation is directed to their cure, they may already have been remedied by the force of public opinion, or they may have disappeared in the evolution of the instrumentality itself. The ills

complained of in the early development of railroad transportation were due to a misappropriation of the public bounty, which, by an indiscriminate liberality, encouraged unrestricted competition in railroad construction and the attendant discrimination in transportation rates. Though unrestricted competition was at the bottom of the abuses which the State sought to cure through the agency of commissions, the fact was not made apparent until, as a consequence of misdirected legislation, competition itself began to disappear in the transference of railroad ownership from many corporations to the few.

Nothing did more to accelerate the consolidation of many small corporations operating lines within the limits of a State into a few great corporations than the prohibition of pooling associations. These associations sustained the rates and the fortunes of the smaller corporations. With the reduction of their rates by unrestricted competition, their fortunes waned. The hand of the federal government was stretched forth to smite them, instead of being interposed to shield them. The many centres of competition which it was to their interest to preserve within the limits of profit to themselves became local stations on the longer lines of the consolidated corporations that rose upon their ruins.

Unregulated competition banished good faith and mutual confidence from the traffic departments of competing railroad companies, and there has always

been a strong opposition to the restriction of competition from favored competitive points and from manufacturing and commercial interests that have fattened on secret rebates, as also by the army of soliciting agents for whom there would then be but little use. The railroad companies therefore were not able to regulate competition otherwise than by pooling agreements, or, when this was made unlawful, by consolidation. The prohibition of all traffic agreements was the death-knell of the regulation of railroad rates by internal control, by the control which accompanied responsibility to the possessors of property rights in railroad transportation. It left no other mode of regulation lawful in the making of joint rates than by the exercise of some control external to the corporate will of the parties directly interested in their pecuniary results. In the one case, the control was coincident with the ownership of the thing to be regulated; in the other, it was the control of a superior power, freed of all responsibility save that of a political character and tempered only by the relief afforded in the courts.

The field for unrestricted competition shrinks continually with the corresponding consolidation of the railroad system, and the evil effects from the former cause become less in need of restrictive legislation. Apprehension for the public welfare is next directed to the anticipated consequences of unrestricted com-

bination, and it is mainly to remedy abuses of this character that there is now a popular demand for the further regulation of railroad affairs by legislation.

In criticising the unfavorable features in the development of our national railroad system, we should not underrate the advantages which have resulted from the speedy binding together of regions widely separated by natural conditions and from the inducements offered by railroads for the easy and frequent intermingling of citizens in social assemblages from every quarter of our country, with the consequent prevention of stagnation in civic affairs and the removal of provincial prejudices and antagonisms. The marvellous extension of our network of railroads has maintained a current of activity throughout every State and Territory, an intermingling of all the diverse social elements into a homogeneous nation, not born of conquest, but of civilization. In doing this, the railroads of the country have repaid with compound interest every dollar that has been expended upon them by cities, States, and the general government.

Much of the profit derived from the construction or consolidation or reorganization of the railroad system of this country was legitimately the fruit of hard labor, physical and mental, the reward of prudent business methods or of intelligent foresight; but, after making a liberal allowance with compound interest for the investment in that railroad system of the savings of the

humble and the capital attracted from foreign lands, the residuum which represents the investments from public funds raised by taxation and of grants from the public domain is certainly large enough to entitle the citizens of the United States to a voice in the management of the lines of transportation which have been built over their private estates by the exercise of their own sovereign power, — roads constructed largely from the taxation of their own property and income, a system of transportation that has rendered competition impossible over the public highways by common carriers. The interest thus acquired by the citizens of this country in the national railroad system is as legitimate an investment as that now possessed by syndicates, and is as much entitled to representation of some character.

If that representation should take the form of a trusteeship of their interests in these gigantic combinations, let their trustees seek only the equitable regulation of their affairs for the benefit of all parties concerned, in the spirit in which the constitutional provisions governing interstate commerce may be justly interpreted. The interests of all should be thereby harmonized, and pernicious agitation should cease. What our people want of the railroads is prompt despatch with regular, reasonable, and open rates, with the privilege of a choice of routes to the trade centres which they prefer, under an equitable

system of rates that recognizes only inevitable differences of environment and conditions. The obvious policy is to recognize, as a fundamental principle, private ownership under government supervision corresponding to the public nature of the functions that the corporations are expected to discharge. This supervision must necessarily be exercised through a competent agency, possessing powers of a quasi-judicial character, to hear complaints and possibly to intervene in disputes between railroad corporations, certainly where the public interest is affected, to insure the equitable interchange of traffic, and unquestionably to have summary powers for investigation of alleged discrimination in favor of persons and to bring such instances to the attention of the courts for criminal prosecution. It is not desirable that competition should be unrestricted, but that the development of our national resources shall be so regulated that, in diminishing the cost of production, transmission, and distribution, the resulting gains shall be equitably divided between the private enterprises which have brought this about and the people to whom these resources are a heritage.

The development of railroad transportation in Great Britain and in this country has not given foundation for the opinion that the private ownership of railroad property has been incompatible with the efficiency of its service in the public interest, for nowhere else has rail-

road transportation reached the same high standards of efficiency. Government control has had no part in this work. The prosperity of our own country has been the result of a development of long-distance freight traffic on a general average of rates much lower than obtains in any other part of the world. As we have seen, the glaring abuses of personal discrimination, which really bore hard upon individuals, has greatly diminished, and the current dissatisfaction with the corporate management of our railroads is directed mainly to discriminations between localities.

These are not direct issues between the railroad corporations and any particular interests, but are really controversies between rival regions of production and centres of distribution for the control of common markets. These controversies are in process of economic adjustment by the interaction of the factors of competition and combination in which the incidence of discriminating railroad rates is but one of many active agencies. Any legislation which disregards this aspect of the current railroad problem will either be useless or injurious, and may tend to making sectional issues of differences that at present are not political but economic.

In what respects are the relations of all concerned in railroad transportation changed as the balance of forces between competition and combination tends toward railroad consolidation? With each consolida-

tion of corporations occupying a natural line of communication, competition disappears at the former junction points. The rates at these points are put in line with the maximum rates at adjacent stations, and discrimination between them ceases. The local shopkeepers regain the business which the junction points had taken away from them, and the railroad revenues are correspondingly increased. As this process of consolidation proceeds, the through service is better performed, but the number of the nation's wards is proportionately increased by the additional number of junction points deprived of their former contract relations, when they were railroad centres.

The consolidation of several corporations along a thoroughfare was beneficial on the whole, but not the consolidation of parallel thoroughfares. The feeders of these parallel lines touch or cross at many points on the respective main lines. Competition at these points necessarily brought the intermediate rates in accord with the through rates, but when the parallel lines became consolidated, the conditions at all these points changed from contract to status, and the intervening territory was brought under a single control. It might have been better if railroad corporations had not been permitted to consolidate, but only to federate in groups under traffic agreements, so far as the public welfare would thereby have been served. The control of the smaller corporations would have remained in local

ownership, and the relations between the possessors and the users of railroad property would have been more closely allied.

When consolidation is prevented by State legislation and the pooling of interstate traffic by federal legislation, combination is attempted by pooling the control of competing roads in a holding company, and accompanying abuses of a novel character call for suitable legislative remedies. It is no longer a question of the regulation of railroad rates, but of the regulation of the manner in which property rights are to be applied to a public service; and under our form of constitutional government, this, it seems, can only be accomplished by the regulation of corporate powers in general.

In this field of railroad administration, broader views must prevail as to corporate responsibilities, or corporate rights will be greatly curtailed because of the abuses of corporate power. In the adjustment of corporate relations with the public welfare, the application of property rights to any purpose of general interest can be retained under corporate control only to the extent that this responsibility shall be recognized. The State should only intervene at the point at which use becomes abuse, at the border line along which the freedom of action of one class of interests impinges upon that of others, for within these limits there is no necessity for regulation other than by internal control. As these limits are exceeded by any individual or class interest,

its own freedom of action should be restricted for the protection of the others. Legislation which anticipates this stage of action is class legislation. It is not legislation in the interest of the public, and this distinction should not be disregarded in restrictive legislation of any character.

The interest of the stockholder lies in securing the greatest possible return from his investment. The interest of the employee is to secure the greatest possible return from the fruits of his labor. It is to the interest of the user of railroad facilities to get the greatest possible service for the least possible compensation. To individuals in each of these classes it is desirable that he should be secured in the use of all his faculties and opportunities to attain his object through the interaction of the forces of competition and combination.

In all ages, efforts to restrict the uses of capital by external control have proved futile where that capital was being put to uses by which the people were benefited. The abuses of wealth may be restricted by laws, but its uses cannot be. In the end, legislative enactments conform to the moulds fashioned by economic laws, where there is an economic basis of society. The application of capital to any public purpose should be unrestricted so long as all the interests involved are free to act for their own protection. But when the freedom of action of any one of these interests becomes restricted, either by competition between any of the others or by

a combination among them, then use merges into abuse, and it is the duty of the State to intervene in behalf of the helpless.

The general public may be likened to the bits of glass of diverse shapes and colors that are viewed in the mirrors of a kaleidoscope. As the instrument is turned in the hand, these bits of glass assume symmetrical aspects, differing from each other, though they all result from successive arrangements of the same individual objects. So also the moral, intellectual, social, and economic interests which make up the sum of the public welfare are but the shifting aspects of individual units of diverse characteristics associated in groups and classes.

Evolution in any field of human activity gradually passes from phases of competition to those of combination. The conflicting groups which still retain freedom of action become consolidated into classes which, by compromises, reach a certain harmony among themselves. This stage of development has been greatly furthered in our civilization by the facilities afforded for incorporation. Here the State intervenes, in the struggle for supremacy between its integral elements, by the creation of artificial persons, whom it endows with its own powers. The natural persons thus grouped together are thereby advantageously organized for a struggle with other persons not so favored.

The justification for this action by the State is that it is intended primarily for the public good, that the

advantages given to the persons in the incorporated groups are but incidental to this main purpose. When these advantages are utilized in the application of incorporated capital to any purpose in which other interests are involved, it is proper for the State to inquire whether they have been fairly or unfairly used, and to prescribe such regulation for their use as will protect the freedom of action of other interests that cannot otherwise secure it for themselves in competition with these incorporated groups.

Therefore, when the lust for aggrandizement directs such advantages to purposes injurious not only to other class interests, but also to the public welfare, the State must meet these novel forms of abuse on the broader field which corporate power has occupied. In this field, corporate capital becomes applied to the purposes of distribution and production as well as to the means of communication. In each of these departments of activity, incorporated groups by degrees supersede individuals, and, in their competition with each other, follow the inevitable path of progressive combination. As their numbers decrease and their power increases by consolidation, the survivors in each department struggle with those in the others until the stage of progressive integration is reached in which the instrumentalities which serve the public in the departments of production and distribution are brought under one control, and the competition becomes narrowed down

to a contest between a few great corporations in the markets of the country, and between a few territorial railroad corporations for its traffic, — rivals whose resources exceed those of the States which incorporated them, and whose power extends over regions that surpass their boundaries.

In the struggle for supremacy between these corporations, the general welfare seemed to be threatened by a power so gigantic that only the federal power appeared to be able to cope with it. Accordingly legislation has been resorted to by Congress for the regulation of the further consolidation of corporate power in the application of wealth in restraint of competition, by the Anti-trust Law. The provisions of this law have been applied, in the wisdom of the Supreme Court, to the regulation of competition between railroad managements in a manner unsuspected by them.

The process of combination has been applied a step farther in the absorption of the means of transportation by corporations that have already combined the instrumentalities of production and of distribution, as in the mining, transportation, and sale of anthracite coal; in the preparation, transportation, and sale of dressed meats and of other refrigerated products, and in the combination of the industry of oil refining with the transmission of oil by pipe lines, tank cars, and steamers, and its distribution throughout the world, in connection with other auxiliary industries.

A monopoly of any one industrial instrumentality has never secured its use or its products to consumers at a reasonable price. It has also a tendency to unite with monopolies in other industrial activities to mutually strengthen their power and influence. The public welfare is lost sight of, and the privileges acquired through legislation are looked upon only as the means of increasing profits. The enlightened views of self-interest can be relied on for the public good only so far as that good seems to be in accord with selfish purposes. When that accord ceases to exist, the border line has been crossed from use to abuse. The purposes of self-interest in the monopolizing corporations are thenceforward to be fathomed by the State and their effects to be regulated for the public welfare.

This is the end which was sought by Congress in the establishment of the Bureau of Corporations, — to inquire into the purposes of monopolizing corporations and into their effects upon the public welfare, and with the aid of the information thus obtained to correct any abuses that might have been discovered, by an intelligent and equitable legislation. For there are equities to be observed, even when dealing with monopolizing corporations.

The railroads of this country employ directly about 1,300,000 people, and with their auxiliary industries probably 2,000,000 men are so employed. The holders of railroad securities are about 1,300,000, also directly

and indirectly many more are interested in the holdings of railroad securities by banks and insurance companies. Taking together the members of all the families thus interested, it is within bounds to say that one-fifth of the people of this country are relying upon railroad profits for their maintenance. Other millions of our people are similarly interested in the profits of the great industrial corporations.

The franchise of incorporation, at first granted for the concentration of the savings of the many for their mutual benefit in competition with individual capitalists, is now utilized by the latter for their own personal aggrandizement. It is not to invite additional capital that they seek corporate rights, but it is for the control that they obtain by the use of corporate power, for that control which will insure them against competition in all profitable fields of industry. By the use which they make of that power they will surely be judged by popular opinion, and for any abuse of it they will as surely be made to pay the penalty by the sovereign power of the people.

Legislation intended to regulate the conduct of the capitalists who have grasped this great corporate power for their own purposes should not also penalize the many who depend upon the pecuniary returns of their operations for a livelihood. Looking at the manner in which corporations have been regulated by State legislatures and by Congress respectively, it is well for these

millions of people that the corporations to which they are bound should preferably be the subjects of federal regulation. ~~X~~

The influence of the State governments upon the regulation of rates has become subordinated to that of the federal government, and the State commissioners revolve in a planetary system around the Interstate Commerce Commission as around a central sun. It is to be regretted that each step taken in the regulation of interstate commerce should be a step away from State sovereignty, but the people have so willed it at the ballot-box, and must abide by the consequences. ~~X~~

The extent to which corporate activity is drawing to itself the industrial instrumentalities of civilization is evinced not only in the almost illimitable resources of some of the corporations and in the almost boundless fields in which they operate, but also in the hosts that they employ. The majority of wage-earners in this country, exclusive of those engaged in agriculture, are carried on corporation pay-rolls. As competition between individual manufacturers led to their respective interests being combined in groups, the interests of their employees were similarly organized, but not by incorporation. They devised a better plan for exerting their united strength against their employers. Their trades-unions have all the advantages to be derived from the use of corporate power without its responsibilities. It will, however, be difficult to draw a distinction, under

the Anti-trust Law, between fixing the prices of commodities by one combination in restraint of trade, and of the prices of labor by another, except by resort to technical quibbling. For a trades-union is a pooling of labor to prevent competition in wages and in fixing conditions of service, and, when such a combination is exerted to the detriment of the public welfare, it is a legitimate object of restrictive legislation as affecting interstate commerce.

Competition between individual wage-earners led to their combination in trades-unions, and the consolidation of these has reached a stage in advance of the consolidation of the corporations with which they conflict; for they are now federated throughout the country, and even aspire to international relations. The relations of incorporated capital and of associated labor rank among the most exciting social and political issues of the day. The foremost men in the land seek to be identified with their discussion, and the conflicts that arise from time to time between employers and employees disturb the peace and comfort of the country at large.

When the State has so regulated railroad affairs that unreasonable rates and unjust discrimination shall have ceased and the forces of competition and combination have been rationally balanced in all fields of corporate activity; when the laborers in the corporate vineyards have secured just wages in return for a fair

day's work, and stockholders and employees are all travelling along the highway to prosperity at an even pace, — what further office will there be for the State to fill in the restrictive regulation of corporations?

What of the producers in a humble way, of the farmers, artisans, and shop-keepers, and clerks, yes, and of professional men as well, each of whom is contributing his infinitesimal share of the travel and traffic and consumption on which the stockholders, the middlemen, and their employees are thriving? These patient asses, toiling along the road of life, are they also keeping step with the favored objects of corporate power, or are they only marking time and taking their dust as they pass?

Ultimately the competition in any incorporated industry may become merged into a struggle between groups of capitalists and of laborers. The conflicting interests of these two classes may even be harmonized at the expense of those who consume the products of that industry. The consumers who are members of those groups may receive in dividends or in wages what they spend as consumers; but where does this leave those consumers who are engaged in industries in which the competitors have not been harmonized? Take the farming class, for instance. What would remain for them, when all other industries shall have been consolidated through the interaction of competition and combination? Perhaps capitalists may then take to

forming agricultural corporations and consolidate their farms into great latifundia, reducing the farmers to a state of tenancy.

The path of social evolution is not in a circle, for the previous conditions can never be restored. It advances along a spiral course from one plane of environment to another. Selfishness tends to restrain it upon the lower plane. On that plane the individual exerts himself for his own purposes, for the support and protection of himself and his family, or for the acquisition of wealth and power. It is the field of material advancement in civilization, and to the extent that individual activity may be exercised in that field, to that extent is the material prosperity of the people as a whole advanced. As the activity of the individual is suppressed, he loses his initiative force and becomes a member of a class which either directs the social order, or is controlled by it. If he be a man of wealth, he is deprived of the satisfaction derived from the personal supervision of productive enterprises. His capital is loaned to the State, to be employed in the public service, whether of war or peace, and he withdraws from business affairs to a life of personal enjoyment. The stage of material prosperity attained in English-speaking countries is largely due to the freedom of individual competition which underlies their political institutions, and which has been exercised accordingly in every possible field of activity.

Competition is therefore mainly profitable as the means for the advancement of material civilization. It tends to combination in groups which are themselves restrictive of freedom of individual action, and instrumental in the stratification of society in classes and castes. Under these conditions individual action becomes paralyzed, and there can be no further general advance in civilization. In the next stage in the evolution of social order, it may be anticipated that, in the triumph of combination in human affairs, individualism will become merged into socialism until competition shall reassert itself and a new cycle shall be entered upon in the further evolution of another type of civilization.

Society, as a whole, advances to a higher plane through the intervention of another inducement to individual activity than that of selfishness, of the state of mind which conduces to the desire to benefit others, called altruism. Through altruism society advances, not materially, but ethically, and it is in emphasizing altruism as a guiding principle of human conduct that this higher plane is to be reached. The happy mean is to be secured by the efficient regulation of the factors of competition and combination, by the equitable balancing of conflicting interests for the common good; and this is the end to be sought in all restrictive legislation.

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